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ABSTRACT

The guidelines and competencies presented in this volume establish criteria for a comprehensive certification program for North Carolina public school teachers, beginning from the point of entry into a teacher preparation program and continuing through initial certification and the first years of full-time teaching. Program approval functions to assure that preparation programs provide opportunities for prospective educators to acquire and demonstrate both the academic and professional skills required for certification and effective practice. Within this context, information regarding certificate requirements, guidelines and competencies for teacher education programs, and areas of specialization is provided on the following: (1) General Studies; (2) Professional Studies; (3) Pre-School, Elementary, and Middle Grades Education; (4) Secondary Subjects (9-12); (5) Exceptional Children and Youth (K-12); (6) Special Subjects (K-12); (7) Vocational Education (6-12); and (8) Special Service Personnel (K-12). Appendices provide information on competencies and indicators for student teachers; competencies and indicators for cooperating teachers who supervise student teachers or interns; competencies and indicators for university supervisors of student teachers or interns; and certification codes and interpretations. (LL)

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March 1993

Teacher Education Section
Division of Teacher Education Services
North Carolina Department of Public Instruction
Raleigh, N.C. 27601-2825

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INTRODUCTION

This volume is intended to be a companion to the North Carolina Standards for the Approval of Teacher Education Programs. It represents considerable revisions in guidelines and competencies for North Carolina certification programs. The guidelines and competencies presented in this volume establish the criteria for a comprehensive assessment system that begins from the point of entry into a preparation program and continues through initial certification and the first years of full-time functioning in the public schools. Such an assessment system reflects North Carolina's commitment to the quality preparation of educational personnel as the basis for certification. Within this context, program approval functions to assure that preparation programs provide opportunities for prospective educators to acquire and demonstrate both the academic and professional skills required for certification and effective practice.

John L. Kinlaw
Assistant State Superintendent
Personnel Services Area

Ione L. Perry

Ione L. Perry
Director
Division of Teacher Education Services

March, 1993

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CERTIFICATION REQUIREMENTS

Completion of Approved Programs

The program for the initial certificate includes, at the minimum, the bachelor's degree. The institutional recommendation of the candidate for a State certificate shall include the endorsement of the certification officer. Prerequisite to the completion of the institutional recommendation for certification, North Carolina institutions must determine that each candidate has satisfied all minimum score requirements on examinations specified by the State Board of Education. These procedures apply to all candidates seeking certificates. Credential evaluations are made by the approved program department/school of education. For example, a college graduate who is a non-teacher education major and who later decides to become certified will have appropriate credentials evaluated by an approved institution. The candidate must satisfy any deficiencies and, upon meeting the requirements of the evaluation, must be recommended to the State certification office by the institution for the appropriate certificate.

Certification Area and Class Level

Certificate areas indicate grade levels, content areas, and specializations for which the professional is or has been prepared. Certificate class indicates the level of preparation, i.e. bachelor's, master's, etc.

Types of Certificates

(a) Teacher - The certificate entitles the holder to teach in some designated area of specialization. Four levels of preparation are provided as follows:

    (1) bachelor's degree
    (2) master's degree
    (3) sixth-year and
    (4) doctorate

(b) Administrator - This certificate is designated as administrator and authorizes the holder to serve in general and program administration roles such as superintendent, assistant or associate superintendent, and principal. There are three levels of preparation (except for superintendent, which requires sixth-year level as minimum to qualify):

    (1) master's degree
    (2) sixth-year and
    (3) doctorate

(c) Education Specialist - This certificate authorizes the holder to serve in roles of specialized assistance to the learner, the teacher, the administrator and/or the education program in general. Roles in this category include the curriculum-instructional specialist, counselor, media specialist and school psychologist. Three levels of preparation are provided as follows (except school psychologist, which requires sixth-year level as minimum to qualify):

    (1) master's degree
    (2) sixth-year and
    (3) doctorate

Levels of Certificates

The levels of certificates recognize different levels and degrees of career development and competence. It is assumed that one will move from level to level as one demonstrates that established performance criteria are met:

(1) Initial Certificate - This certificate (valid for two years) allows one to begin practicing the profession on an independent basis. It can be converted to a continuing certificate if established performance criteria as a full-time practicing professional for two years are met

(2) Continuing Certificate - This certificate authorizes professional school service on a continuing basis and requires continued professional development by certificate renewal every five years

(a) teacher (class "A" undergraduate and class "G" graduate):

(i) birth through kindergarten, B-K
(ii) elementary education, K-6
(iii) middle grades education, 6-9
(iv) secondary subject areas, 9-12
(v) special subject areas, K-12
(vi) vocational education, 6-12

(b) administrator, birth-12

(c) educational specialist, birth-12:

(i) counselor
(ii) curriculum-instructional specialist
(iii) media supervisor
(iv) school psychologist
(v) mentor
(vi) vocational director
(vii) program administrator (exceptional children)
(viii) social worker
(ix) instructional technology specialist (computers)

Certificates for Non-Teacher Education Graduates

Certificates for non-teacher education graduates include both In-State and Out-of-State graduates. A non-teacher education college graduate who later decides to teach must have his/her credentials evaluated by an approved institution or teacher education consortium. The applicant must satisfy any deficiencies and, upon meeting the requirements of the evaluation, is recommended for the appropriate certificate.

Endorsements to Certificates

Individuals qualifying for special subject or secondary subject area certification at an institution of higher education (IHE) offering approved teacher education programs may also be recommended for an endorsement by that institution if the IHE has a school/department in the area for which endorsement is sought. Elementary second language endorsement is specifically defined for issuance in conjunction with an existing elementary certificate. An endorsement should be based on the equivalent of eighteen or more semester hours in a specific content area where such hours are appropriately related to competencies specified for full certification in that subject area, unless otherwise noted in particular teaching area competencies and guidelines.

History Notes: Statutory Authority G.S. 115C-295; 115C-296;
115C-298; 115C-309;
Adopted Eff. July 1, 1983.

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GUIDELINES AND COMPETENCIES FOR TEACHER EDUCATION PROGRAMS

The program guidelines included in this volume are designed to be suggestive and directional rather than prescriptive to permit flexibility and diversity among institutions and programs. The competencies delineated for each of the certification areas are role-derived and are intended for use in planning and implementing approved teacher education programs. Colleges and universities are encouraged to move beyond minimum expectations in a continuous effort to achieve excellence in teaching.

The program of preparation of any prospective teacher should be based on the recognition that the student is preparing to assume the roles and responsibilities of a teacher. It is assumed that a teacher should: (1) be liberally educated; (2) have competence in the academic or program areas in which certification will occur; (3) understand students, their needs, and how they learn; (4) possess qualities needed to work effectively with students; and (5) possess the disposition for continued learning as a practicing professional. Therefore, teacher education programs are designed to provide for both the common academic and professional needs of all teachers and the specialized needs for those preparing for particular teaching positions. These needs are addressed through general education, professional education, and teaching specialization components in programs leading to initial certification.

The basic academic competencies described for general education should be acquired by all prospective teacher candidates prior to admission into a teacher education program. The professional competencies required for all teachers as well as those described for particular areas of specialization should be acquired prior to initial certification and professional entry. It is recognized that institutions may design curricula leading to the acquisition of desired teaching behaviors in many different ways depending on philosophy, organizational structure, student needs and other considerations.

AREAS OF SPECIALIZATION

Specializations in elementary education, middle grades education, secondary education, exceptional children, K-12 subjects, and vocational education are designed to include competencies needed to qualify an individual to teach in those areas. General education logically serves as a base for study in a specialization but work in the prospective teacher's specialization may begin during the period typically devoted to general education. Professional studies include courses and experiences addressing those competencies that are common to all teachers as well as competencies described in the following sections that may be unique to the specialty.

The program should provide a wide range of content based on a continuum of experiences at ever-increasing levels of comprehension and skill. The amount of time that the prospective teacher should devote to the specialization will depend on individual needs and on the area of specialization. In order to accommodate individual needs, the program should be capable of providing approximately 25 to 40 percent (depending on the area) of the undergraduate study. Programs for initial certification in the various specializations should be planned in accordance with the competencies described for the various areas of specialization.

NOTE: Endorsements to Certificates

Within the operation of approved programs, individuals qualifying for full certification may be recommended by an institution for an endorsement to that certification. An endorsement should be based on eighteen or more semester hours in an additional specific content area where such hours are specifically related to competencies required for full certification in the area, unless otherwise noted in particular teaching area competencies and guidelines. Endorsements to certificates enable an individual to teach in the endorsed area less than half-time.

NOTE: Middle Grades Concentrations

Under the operation of the approved program, middle grades subject or content area concentrations should approximate a minimum of 18 semester hours when such hours are related directly to teaching area competencies, unless otherwise designated in particular teaching area competencies and guidelines.

NOTE: Computer Competencies and Utilization in Content Areas (Level II)

Training at this level should prepare educators to use computers as both instructional and management tools. Whereas Level I training provides an information base and minimal skill development for all educators and should be addressed as a part of general education competencies, Level II training should enable teachers (grades 6-12) to incorporate the use of computers into their content area instructional planning. Level II competencies should be offered within appropriate subject departments and should provide the necessary knowledge and skills to design unit/lesson plans, evaluate and select appropriate computer courseware, plan effective utilization strategies, and evaluate the results of computer activities. Computer competencies identified in the subject/content areas are included within the respective subject area competencies for middle grades concentrations and secondary areas of certification. Computer competencies are listed at the end of competency listings for grades 9-12, K-12 or with core competencies for a subject area such as science.

General Studies

GENERAL STUDIES

These guidelines and competencies will be applied to all institutions that select the State Unit approval process. They will not be applied to institutions that select the NCATE Unit approval process.

A. General Studies

The teacher education curricula should require a pattern of general studies in such amount and of such nature as to assure that all teachers will be literate, broadly educated, and cultured persons. The program should comprise approximately 35 percent of the four years of undergraduate study. In implementing the program, flexibility should be provided to the extent that adaptation to individual needs is possible. Both the uniqueness of each of the fields of knowledge and the interrelationships among the fields should be emphasized. The overall program should be conceptualized on the basis of competencies needed by the teacher. Proficiency in any area might be satisfied through accepted evaluation procedures.

B. Guidelines and Competencies for General Studies

GUIDELINE 1: The program should develop an understanding of the influences of communication on individual development and of the processes of learning to listen, speak, read, and write the English language clearly and effectively.

The preparation of teachers should include learning experiences sufficient to provide a thorough understanding of language as a factor in human development and the processes of learning to listen, speak, read, and write.

1.0 Communication

- 1.1 Listening skills that contribute to the development of effective literal, interpretive, and critical listening
- 1.2 Speaking skills that facilitate effective verbal expression of ideas and feelings
- 1.3 Reading skills that facilitate comprehension of written thought, including:
    - 1.3.1 Recognition of organizational patterns within written material
    - 1.3.2 An understanding of literal, interpretive, and critical comprehension levels
- 1.4 Writing skills that contribute to effective written expression, including:
    - 1.4.1 A working knowledge of standard grammar and usage
    - 1.4.2 Proficiency in the use of reference skills

1.4.3 Application of the principles of expository writing in developing and organizing themes and other written materials

GUIDELINE 2: The program should develop a critical understanding of and a sensitivity to the aesthetic, philosophical, ethical, and imaginative values expressed in literature.

The focus of the study of literature should be to create literate citizens who have broadened their knowledge of life through literature.

2.0 Literature

2.1 Knowledge of the principal types of creative literature

2.2 Familiarity with representative works of world literature

2.3 Knowledge of critical concepts in the analysis of literary works

GUIDELINE 3: The program should present a study in the fine arts in sufficient depth to develop an understanding of the nature of and need for aesthetic experiences.

The program should develop an understanding of the role of the arts in the development and transmission of human culture, including the ways the fine arts have influenced and continue to influence individuals and groups as they find meaning in life.

3.0 Fine Arts

3.1 Knowledge of the basic concepts in art, drama, dance, and music

3.2 Knowledge of the relationships among styles in fine arts and external factors in society

3.3 The ability to analyze a work of visual art and/or a performance for its qualitative attributes

GUIDELINE 4: The program should provide study in the social studies content areas at the level necessary to provide an understanding and appreciation of the interplay of the social, political, geographical, economic, and cultural forces shaping society.

Study in this area should present the basic tenets and institutions of a democratic society. It should contribute to an understanding and appreciation of the American culture and the interrelationships among all cultures of the world.

4.0 Social Studies

4.1 Knowledge of governmental systems

4.2 Knowledge of basic economic principles as they relate to goods, services, and resources

4.3 Knowledge of social systems and their interrelationships

4.4 Knowledge of American civilization and its background

GUIDELINE 5: The program should develop an understanding and appreciation of the structure and applications of mathematics.

Study in this area should include learning experiences sufficient to provide students with both knowledge of mathematics and its application(s) in everyday living.

5.0 Mathematics

5.1 An understanding of the structure of number systems by displaying:

5.1.1 Skills in computation

5.1.2 Skills in the interpretation of graphs and charts

5.2 An understanding of the theory and use of algebra and geometry

5.3 Knowledge of concepts related to standard units of measurement

5.4 An understanding of the principles of mathematical reasoning

GUIDELINE 6: The program should develop an understanding and appreciation of the structure of science, the nature of scientific thought and inquiry, and the major scientific principles.

The study should present an understanding and an appreciation of the physical world, promote an understanding of the interrelationships that exist among the various science areas, and develop an awareness of the involvement of science in everyday living.

6.0 Sciences

6.1 Knowledge of concepts of physical science

6.2 Knowledge of concepts of earth science

6.3 Knowledge of concepts of biology, including theories of heredity and the structure and functions of the various body systems

6.4 Knowledge of ecology and the environment

6.5 Knowledge of the scientific method including application of science process skills

GUIDELINE 7: The program should develop the knowledge, habits, and attitudes necessary to achieve and maintain sound physical and mental health.

A realization of the objectives in this area requires experiences in health, safety, and physical education.

7.0 Health, Physical Education, and Safety

7.1 Knowledge of basic concepts relating to health, physical education, and safety

7.2 Skills and behaviors associated with health, physical education, and safety

7.3 Positive attitudes toward and appreciation for all aspects of healthful living

7.4 Ability to apply health, physical education, and safety to a personal style of healthful living

Professional Studies

PROFESSIONAL STUDIES

A. Professional Studies

Professional education studies are those that are unique to the art and science of teaching. As such, they are designed to provide all prospective educators with the generally accepted core of knowledge, research, theory, and applications that form the base for effective professional practice. Additionally, they provide a framework in which educational problems and developments may be understood and interpreted. The areas comprising professional studies include social and behavioral sciences, human growth and development, teaching and learning theory, and laboratory experiences appropriate to program objectives. The professional competencies identified below are required for all prospective teachers seeking initial certification.

B. Guidelines for Professional Studies (ALL TEACHERS)

The professional studies component should be designed to assure the acquisition of professional competencies required for all teachers, as well as those competencies that are specific to an area of specialization.

GUIDELINE 1: The professional studies component should provide humanistic study of the problems, issues, and trends in education within an historical, philosophical, sociological, economic, and governmental framework.

Study under this guideline may be identified as being behavioral and humanistic in nature. The major purpose of the study is to provide the student with a set of human and theoretical contexts in which living and learning problems can be understood and interpreted. It is assumed that problems regarding the nature and aims of education, public school laws relating to the roles and responsibilities of the teacher, the curriculum, and the organization and administration of a school system will be studied with respect to their historical development and the philosophical issues to which they are related. In the same studies, the problems of education should be studied from an interdisciplinary standpoint to include the findings of sociology, economics, political science, anthropology, and other related disciplines.

GUIDELINE 2: The professional studies component should include the systematic study of the processes and theories of human growth, development, learning, and teaching, including research relative to student achievement and teaching effectiveness.

Study under this guideline should focus on cognitive, psychological, and social growth including factors that enhance or retard such growth. Study should provide knowledge necessary for understanding attitudes and behaviors in relation to such factors as age, sex, cultural background, and socio-economic conditions and their implications for creating effective learning environments. The relationship of growth in all of its aspects should be emphasized. The findings of research related to teaching effectiveness and student achievement should be incorporated into study under this guideline. Study should be combined with appropriate laboratory experiences (both simulated and real) that enable prospective teachers to internalize the principles involved through practical applications.

GUIDELINE 3: The program should provide for study of exceptional children and youth, including implications for education.

Study under this guideline should emphasize the variety of factors which impinge upon exceptional children and youth, including a recognition of their social, emotional, physical, and intellectual characteristics. Study should focus on their unique educational and vocational needs in relation to adapting curriculum and selecting appropriate instructional strategies.

GUIDELINE 4: The program should provide prospective teachers with the knowledge and skills necessary to implement basic skills instruction and recognition of the uses of the computer in the educational setting.

Study under this guideline should include methods of teaching reading and other communication skills that are fundamental to learning within the K-12 continuum as well as those basic skills appropriate to a particular area of specialization. Study should include planning and organizing differentiated instruction to meet the diverse needs of students and should develop an awareness of the computer, including its implications and uses in teaching-learning processes.

GUIDELINE 5: The program should provide the prospective teacher with knowledge and skills necessary to manage the classroom effectively.

Study under this guideline should include the basic principles and techniques of classroom and behavior management as they relate to organizing and pacing instruction, systems for observing and analyzing classroom behavior, use of effective group structures, and methods for working effectively with para-professionals and others involved with the instructional process.

GUIDELINE 6: The program should include the study of processes and techniques for analyzing and evaluating the teaching-learning environment.

Study under this guideline should focus on the roles of diagnosis, testing, and evaluation in constructing and maintaining effective learning environments as they relate to planning, prescribing, and implementing instruction. This includes the understanding and effective use of various formal and informal instruments and techniques in relation to organizational practices, teaching performance, individual pupil learning, and learning media and materials. Attention should be given to the construction and use of teacher-made tests, self evaluation, and the ability to aid students in evaluating their own performance.

GUIDELINE 7: The program should provide prospective teachers with the knowledge and skills necessary to design and carry out appropriate instruction in the area of specialization.

Study under this guideline should provide the prospective teacher with a repertoire of instructional methods, techniques, and materials for carrying out the instructional program in the area of specialization. The preparation should include basic principles of instructional design and the selection and integration of content, media, and materials that are appropriate for a particular school environment. Study under this guideline should include laboratory experiences that provide direct classroom application of the principles and techniques in the area of specialization.

GUIDELINE 8: The program should provide a sequentially planned and evaluated series of laboratory experiences that provide opportunities for the prospective teacher to gain increased proficiency in performing various teaching responsibilities.

Laboratory experiences should begin prior to admission into a teacher education program and culminate in a period of extended, continuous, and supervised full-time teaching or internship in the area or areas of specialization for a minimum of ten weeks. Laboratory experiences should be designed to provide the prospective teacher with opportunities for direct observation in a number of classroom settings, varying degrees of participation in appropriate teaching situations, and opportunities to apply theory, develop skills, and demonstrate required competencies.

GUIDELINE 9: The professional studies component should develop an awareness of the need for continuing education and professional development.

Study under this guideline should focus on the rapidly expanding body of knowledge devoted to learning and the learning process and requires that teachers become lifelong learners. To do this they must view professional learning as a continuing need and must accept responsibility for meeting that need. Every teacher education program should include experiences designed to develop in the individual the capacity and the disposition for continuous learning.

C. Professional Competencies Required of All Teachers

Professional Knowledge and Role Understanding

1.0 Demonstrate knowledge of the influence of significant political, economic, and socio-cultural forces on American education

2.0 State the role of Federal, State, and local governments in support and control of American education

    2.1 State the major North Carolina regulations governing the teacher's authority and responsibility for pupil management

    2.2 State the rationale for providing the least restrictive placement for special needs groups

    2.3 Identify the range of referral services available to meet pupil needs

    2.4 Identify issues involved in providing school services for diverse cultures and special needs groups

    2.5 State essential requirements of Federal and State judicial and legislative requirements for educational service to exceptional children

    2.6 State characteristics of children with special needs according to categories of exceptionalities established by North Carolina Rules and Regulations

3.0 Classify examples of curricula design and instructional practices according to the philosophical assumptions upon which they are based

3.1 Identify alternative curricular and instructional models

3.2 Describe the implications of research on student achievement in relation to instructional practice and teaching effectiveness

4.0 Describe the implications of emerging technology and the uses of the computer in relation to instructional programming in the public schools

5.0 Describe the vertical and horizontal patterns of school organization

6.0 Describe the role of professional organizations in American education

7.0 Demonstrate protection of individual privacy through appropriate professional and personal interactions.

Planning

8.0 Utilize knowledge of cognitive, social, affective, and psychomotor development in planning instruction

8.1 Identify cognitive processes that affect pupil performance in achieving instructional objectives

8.2 Identify motivational techniques that influence pupil performance in achieving instructional objectives

8.3 Describe multi-cultural implications to be considered in planning instruction

9.0 Utilize knowledge of the characteristics of pupils with special learning needs in adapting curriculum and planning instruction

10.0 Generate a sequence of instruction based on an analysis of pupil performance objectives

10.1 Classify instructional objectives according to a recognized taxonomy

10.2 State essential conditions of learning associated with categories of learning specified by a selected taxonomy

10.3 Generate pupil performance objectives in precise and measurable terms

10.4 Generate pupil performance objectives that address different levels of thinking

10.5 Generate a task analysis of a pupil performance objective

10.6 Generate alternative strategies for attaining a particular objective

11.0 Describe the purposes of formal and informal diagnosis in planning instruction

11.1 Differentiate among diagnostic measures that are compatible with various instructional objectives

12.0 Relate instruction to meet health and safety needs of students

13.0 Select appropriate instructional materials, media, and other software that are compatible with pupil learning styles and instructional objectives

13.1 Describe the function and use of curriculum guides; the Standard Course of Study and the Teacher Handbook for the competency-based curriculum, K-12; and multi-media materials and other resources as they relate to planning appropriate instruction, K-12

14.0 Work effectively with other professional and para-professionals for planning to meet pupil needs

Instruction

15.0 Demonstrate a command of subject matter necessary to carry out the objectives of the instructional program in the areas of specialization

16.0 Utilize instructional methods and techniques that are consistent with sound practice and research findings on teacher effectiveness

17.0 Implement instruction that is appropriate to meet student needs and achieve learning objectives

18.0 Implement instruction in basic skill development, including reading and other communication skills

19.0 Modify instruction in ways appropriate for pupils with special learning needs

20.0 Demonstrate motivational techniques appropriate to student needs and instructional objectives

21.0 Demonstrate use of referral services and community resources in meeting the educational needs of pupils

Classroom Management

22.0 Implement effective classroom and behavior management techniques to meet the learning needs of students

22.1 Utilize the findings of systematic classroom observation systems to analyze pupil behavior

22.2 Identify alternative instructional management systems

22.3 Identify various techniques for student behavior management

22.4 Establish group structures appropriate to pupil learning needs and objectives

Evaluation

23.0 Demonstrate evaluation techniques appropriate to program goals

24.0 Utilize evaluation findings to modify instructional practice and in planning program revisions

25.0 Demonstrate appropriate procedures for reporting evaluation results to parents and others to whom federal and state statutes grant access to such information

Computer Competencies for All Educators (Level I)

26.0 All educators should be able to demonstrate an appropriate understanding of the basic concepts of hardware and software in relation to the use of the computer by:

26.1 Displaying general knowledge of computer technology, particularly as it relates to hardware and software applications

26.2 Exhibiting familiarity with the basic components of a computer system; e.g., input/output, storage, central processing unit

26.3 Performing computer operations; e.g., on-off sequence, loading/running/saving/copying programs, printing program output

27.0 All educators should be able to demonstrate knowledge of the capabilities and limitations of computers and programs by:

27.1 Identifying current uses of computers in various areas: e.g., home and recreation, business, industry, transportation

27.2 Distinguishing between computer capabilities and limitations with special emphasis on its use as an instructional tool

28.0 All educators should be able to demonstrate the ability to discuss the effects of computers on society by:

28.1 Organizing programs on the current issues which have evolved as a result of the computer; e.g., personal privacy, ethical issues, copyright issues

28.2 Identifying resources to use to interpret the potential uses of computers and other technologies; e.g., robotics, artificial intelligence, electronic data bases

29.0 All educators should be able to demonstrate the ability to use the computer in instructional programs by:

29.1 Identifying, evaluating, and selecting effective courseware using accepted evaluative criteria

29.2 Identifying and/or developing teaching strategies necessary to integrate computer courseware into the on-going instructional program

29.3 Using the computer for Computer Assisted Instruction (CAI); e.g., drill and practice, simulations/games/models, tutorials, problem solving

29.4 Using the computer for Computer Managed Instruction (CMI); e.g., student enrollment, student performance and grade reporting

29.5 Identifying effective and various uses of the computer as a tool to support the instructional programs; e.g., word processing, data location and retrieval, test generation

Pre-School Education
Elementary Education
Middle Grades Education

BIRTH THROUGH KINDERGARTEN (B-K) CERTIFICATION UNDERGRADUATE GUIDELINES AND COMPETENCIES

RATIONALE

Special knowledge and skills are required to work with children from birth through kindergarten, due to the developmental differences that exist in children during those years and to the diversity of settings in which personnel must work. The number of pre-kindergarten children served through the public school system is growing dramatically and will continue to grow because of the passage of PL 99-457, the initiative to channel Chapter 1 funds into preschools in local school systems, and other developing Federal, State, and local programs involving young children.

Development proceeds on a continuum, not categorically. During the preschool years, developmental domains are inseparable from one another and a delay in one can produce compensations and/or delays in another. Personnel who work with young children must have a thorough knowledge of the development of the whole child and of the variations in that development.

Children with special needs are increasingly being served in mainstreamed settings. This practice is supported by the philosophy that these settings are the best for all children and, in addition, there is great concern about the negative effects on children of early labeling. Those effects are avoided when teachers are competent to facilitate the learning and interaction of all children.

PHILOSOPHY

Whenever the term "young children" is used in this document, it refers to children defined as infants, toddlers, and preschoolers, encompassed in the certificate "Birth through Kindergarten."

This philosophy statement has been divided into the four major areas in which working with young children differs from working with school-age children.

Children. Young children are different from school-age children. They are extremely diverse in nature; that diversity is found in their cultural backgrounds, learning styles, rates of development, degrees of special need, and individual preferences. Their learning is primarily characterized by a holistic approach, innate curiosity, action rather than passivity, spontaneity, and biological rhythms, as opposed to "calendar-driven" expectations. Some children have special needs that interfere with the expression of curiosity and action, requiring more direct mediation. Young children are more environmentally dependent than older children and thus have a strong need for acceptance and external positive evaluations from adults as well as a concrete, rich environment. Finally, in young children there is a strong interaction between health status and children's developmental progress and behavior.

Families. Families of young children have a critical impact on their development; as children mature and encounter other settings, other influences become prominent. Therefore, for the optimal development of young children, programs must work in partnership with families; parents must be respected as individuals and recognized as the constant presence in their children's lives. Families of young children are extremely diverse, making knowledge of family systems and interaction crucial for all B-K teachers. Families vary in composition, values, culture, knowledge of parenting and child development, economic status, degree of stress, and level of trust regarding interacting with professionals. Teachers must know how to create a program that fosters family collaboration and is consonant with family goals. Teachers must also be prepared to assist families in seeking and acquiring a wide range of interagency services designed to strengthen the family unit.

Teachers. Teachers of young children are active facilitators of children's learning in a variety of contexts. They cannot rely on direct instruction as do teachers of school-age children; thus the teaching process with young children must be different. The knowledge base for teachers of young children is typical and atypical child development, strategies for facilitating development and learning, and methods for working with families. Teachers must be able to create developmentally appropriate, nurturing, warm environments that provide a wide range of concrete, exploratory materials and experiences that encourage child-initiated learning and that are adaptive to children's special needs and individual learning styles. Teachers must be committed to working in partnership with families and understand the family environment as an important vehicle for the child's positive growth and development. Teachers must be prepared to observe, assess, and record young children's behavior in context, interpreting and responding appropriately on the spot, with ready access to a variety of possible responsive strategies. Teachers must know how to establish individual goals and objectives for children and families; they must be prepared to work as team members with other disciplines and with various agencies concerned with the child's welfare and, when necessary, they must be prepared to assume an advocacy role.

Settings. Compared to teachers of school-age children, teachers of young children work in extremely diverse settings (e.g., classrooms, day care centers, residential placement centers, intermediate care facilities, hospitals, homes, crisis nurseries, shelters). The presence of diverse funding sources for these programs means that teachers do not have control over the standards of practice operating within them but must work in collaboration with a variety of agencies and other personnel. The teachers must be prepared to design and/or adapt settings to be more responsive than directive; the teacher must be able to analyze whether these settings are appropriate for a wide range of children's capabilities. Settings for young children are open to participation by family members as well as professionals from other disciplines and interested members of the larger community.

BIRTH THROUGH KINDERGARTEN CERTIFICATION
UNDERGRADUATE GUIDELINES AND COMPETENCIES

GUIDELINE 1: The program should provide an understanding of various stages and substages of growth and development in young children, the unique patterns with which children progress through these stages, and the factors that distinguish the wide range of typical from atypical development.

To achieve this purpose, students completing the Program will be able to:

1.1 Demonstrate knowledge, understanding, and recognition of the theories and principles of human development, growth and learning with a primary focus on young children. The following domains of development should be included: sensorimotor, cognitive, adaptive, language/communication, social, aesthetic, emotional, and physical

1.2 Demonstrate knowledge of potential impacts of general and specific disabilities, delays, or risk factors on the different domains of development

1.3 Recognize and demonstrate respect for major cultural and sociological differences in child development and views of the child as a functioning individual within the environment

1.4 Demonstrate knowledge of the interaction between biological and environmental factors that have a direct influence on or that place the child at risk for developmental delay or disability

1.5 Demonstrate awareness that children learn in holistic, rather than fragmented ways, and of the inextricable link between communication skills and the quality of concrete experiences provided through early, concept-forming activities

1.6 Demonstrate understanding of the interrelatedness of all domains of human development for both typical and atypical children

1.7 Demonstrate knowledge of the etiology, symptomatology, and classification of common developmental disabilities or conditions in young children and their developmental impact, including disorders of the central and peripheral nervous system, bones, muscles and joints, metabolism and gastrointestinal tract, heart, lungs, circulation, and sensory systems

GUIDELINE 2: The program should develop knowledge and skill in the design/adaptation and implementation of developmentally appropriate learning environments for young children. The program should develop knowledge and competencies in the areas of creating and adapting environments, fostering learning within environments, and environmental management of physical, health, safety, and medical needs.

To achieve this purpose, students completing the Program will be able to:

Creating and Adapting Learning Environments

2.1 Demonstrate knowledge and skill in creating a new learning environment or adapting an existing environment so that it is developmentally appropriate for young children with typical and atypical needs

2.2 Create a multicultural environment, or adapt an existing one, so that it is reflective of the homes and communities of the children

2.3 Identify and use developmental principles in creating or adapting indoor and outdoor learning environments

2.4 Within a classroom environment, plan appropriate small group, large group, and individual times

2.5 Demonstrate knowledge and skill in fostering high quality interactions with children during play and in guiding children's inquiry and discovery

2.6 Plan an appropriate balance between child-initiated and adult-initiated activities, based on the needs of the children

2.7 Demonstrate knowledge of methods for providing individual and group learning time through a variety of formats including play, environmental routines, parent-mediated activities, and guided inquiry relevant to preschool and kindergarten, including methods for sensorimotor, cognitive, adaptive, language/communication, social, aesthetic, emotional, and physical development

Fostering Learning Within Environments

2.8 Demonstrate knowledge of strategies to facilitate children's involvement in planning for their own learning

2.9 Apply developmental principles to the process of establishing guidelines for children's behavior that maximize self-control, problem-solving, and independence

2.10 Demonstrate knowledge of and skill in fostering self-regulation in children by using environmental manipulations and a variety of behavior management and guidance techniques, including attention to the arrangement of the physical and psychological environment as it relates to individual children, scheduling, and transitioning

2.11 Demonstrate the ability to facilitate learning through play and child-initiated activities

2.12 Demonstrate knowledge of the incorporation of a variety of teaching strategies including physical prompts, play intervention, direct and indirect teaching, child-initiated learning, fostering motivation in children, and using developmentally and functionally appropriate technology

2.13 Demonstrate competency in enhancing social interaction and integrating typically and atypically developing children

2.14 Provide an environment that clearly demonstrates knowledge-based decisions about young children and a design deliberately responsive to a wide range of individual learning and maturational needs

2.15 Demonstrate skill in the role of consultant to programs and persons working with young children in a variety of settings to ensure that those environments are developmentally appropriate

Managing Physical, Medical, and Health Needs

2.16 Demonstrate knowledge in the interpretation of medical histories and reports concerning young children with special needs

2.17 Demonstrate knowledge of health and safety procedures in home and group settings

2.18 Demonstrate knowledge of the health, medical, and physical needs of individual children when preparing the learning environment

2.19 Demonstrate knowledge of appropriate health appraisal procedures and the process of making referrals

GUIDELINE 3: The program should develop an understanding of developmentally and functionally appropriate curricula and methods for children from birth through two and for children three through kindergarten, including the knowledge and skill in utilizing a variety of curriculum models.

To achieve this purpose, students completing the Program will be able to:

Developmental Curriculum: Birth through Two

3.1 Support and facilitate family/child interactions as primary contexts for learning and development in infants and toddlers

3.2 Demonstrate skill in the provision of concrete experiences and the integration of knowledge about the physical and social world and the arts

3.3 Demonstrate an understanding of the characteristics of varied learning environments and strategies that facilitate development, learning, and independence in infants and toddlers

3.4 Follow developmental and functional curricula and methods for infants and toddlers across all areas of development and learning including sensorimotor, cognitive, adaptive, language/communication, social, aesthetic, emotional, and physical

3.5 Analyze and evaluate the philosophical bases and theoretical orientation of various curriculum models for infants and toddlers

3.6 Integrate knowledge and strategies from professional team members (e.g., speech and language pathologists, physical therapists) in design and implementation of structured and unstructured learning activities for infants and toddlers

3.7 Develop, implement, and evaluate Individualized Family Service Plans (IFSP) for atypically developing infants and toddlers in partnership with family members and other agencies or professions, incorporating both child and family goals and strategies

Developmental Curriculum: Three Years Old Through Kindergarten

3.8 Demonstrate skills in using various planning strategies including cooperative planning, problem solving with other adults, involvement of professional team members, teacher assistants, and parents in programs for children aged three years old through kindergarten

3.9 Demonstrate skill in the provision of concrete experiences and the integration of knowledge about the physical and social world and the arts

3.10 Design curricular activities that integrate multiple developmental areas and levels of ability

3.11 Understand cultural diversity and integrate a multicultural perspective throughout the curriculum

3.12 Follow developmental and functional curricula and methods for children three years old through kindergarten across all areas of development and learning: sensorimotor, cognitive, adaptive, language/communication, social, aesthetic, emotional, and physical

3.13 Analyze and evaluate the philosophical bases and theoretical orientations of various curriculum models for children three years old through kindergarten

3.14 Demonstrate skills in writing, implementing, and evaluating appropriate Individualized Education Plans (IEPs) that reflect functional as well as developmental goals and objectives for atpyically developing children three years old through kindergarten and their families and which have been developed in partnership with the family and other agencies or professions

3.15 Demonstrate skills in incorporating goals of individual children three years old through kindergarten in all group activities

3.16 Demonstrate the ability to integrate functional as well as developmental objectives for learning

3.17 Integrate current knowledge regarding best practices for enhancing social interaction among and between preschoolers of varying developmental levels

3.18 Integrate children with varying levels of ability in all curricular experiences

GUIDELINE 4: The program should provide knowledge and skill in working collaboratively with families.

To achieve this purpose, students completing the Program will be able to:

4.1 Demonstrate knowledge and understanding of the stages of adult development and family influences that affect communication approaches

4.2 Demonstrate skills in establishing and maintaining effective communication and collaborative relationships with families and caregivers for the purpose of enhancing the development of the child

4.3 Demonstrate knowledge of theories and models for understanding family systems, functioning styles, and stages of development and their relationship to community and cultural influences

4.4 Demonstrate understanding that parents are the first and constant teachers for their children

4.5 Demonstrate knowledge of research on the impact of parents on children's learning and development

4.6 Demonstrate knowledge of a range of agency services, program options, curricula, and materials for families of young children and assist families in the selection process

4.7 Recognize the impact of a child, developing typically or atypically, on family dynamics and parent-child interaction

4.8 Demonstrate strategies for facilitating the identification of concerns, priorities, and resources for families of atypically developing children

4.9 Demonstrate strategies for developing and evaluating family service plans that integrate identified child and family goals with resources and service options.

4.10 Demonstrate competence in identifying family concerns, priorities, and resources for families from diverse cultural environments

GUIDELINE 5: The program should emphasize foundations for professional development, positive attitudes toward children and families, and should foster a strong commitment toward continuous, life-long study of young children and their learning.

To achieve this purpose, students completing the Program will be able to:

5.1 Demonstrate a knowledge of the history of the field of child development and the education of young children

5.2 Demonstrate a knowledge of the philosophical, historical, and legal bases and characteristics of the field of early childhood special education

5.3 Demonstrate knowledge of the trends, issues, and research in early intervention efficacy and early childhood education

5.4 Demonstrate a professional attitude in seeking new knowledge and experience by staying abreast of current professional literature, participating in research, seminars, staff development, lectures, professional organizations that foster learning, and by communicating with knowledgeable individuals

5.5 Demonstrate the development of personal values and an adherence to a professional codes of ethics related to education, social services, and medical interventions with young children and their families

5.6 Demonstrate understanding the roles of the teacher as a researcher, decision-maker, advocate, and consultant

5.7 Demonstrate knowledge of federal and state legislation affecting young children and their families

5.8 Demonstrate knowledge of the role of case management/service coordination in early intervention

5.9 Demonstrate attitudes that indicate respect for diverse cultural values and family structures

5.10 Demonstrate attitudes that focus and build on the strengths of children and families rather than emphasize weaknesses

5.11 Demonstrate personal characteristics appropriate for professional functioning (e.g., active listening, flexibility, problem solving)

5.12 Demonstrate knowledge of and personal opinions on respect for such major ethical issues as confidentiality, informed consent, and intervention versus manipulation

GUIDELINE 6: The program should provide for competence in data collection focused on children's individual development. The program should provide for the development of skills in effectively accessing and utilizing screening and assessment procedures for children with special needs. The program should provide for the development of skills in program evaluation.

To achieve this purpose, students completing the Program will be able to:

6.1 Demonstrate skills in observing, recording, analyzing, and using data gathered from and about children engaged in real, concrete, play-oriented activities in their own daily learning environments

6.2 Demonstrate understanding of the purpose, importance, and limitations of screening, diagnosis, educational assessment, and progress monitoring

6.3 Demonstrate competence in communicating with parents and other professionals the results of naturalistic observations and/or screening and assessment batteries and the implications for decision-making and instructional planning

6.4 Demonstrate competency in assessing typical and atypical development of children for the purposes of providing for individual needs and guiding young children appropriately

6.5 Demonstrate competency in using different approaches for observing child/environment interactions, including play environments and daily routines

6.6 Demonstrate competency in using different approaches for observing child/other interactions, including parent/child and child/child interactions

6.7 Demonstrate competency in the administration, modification, and interpretation of at least one instrument in each of several types of data collection (e.g., screening, developmental assessment, informant interview, behavior rating scales, anecdotal note-taking, play observation)

6.8 Demonstrate competency in accessing more specialized assessments of children as warranted

Program Planning and Evaluation

6.9 Demonstrate skills in comprehensive planning, including effective and efficient use of time, incorporation of a goal focus, analyses of daily activities, quality of interactions in the program, and observations of individual children

6.10 Demonstrate skills in evaluating and modifying individual child education programs, strategies for working collaboratively with families, as well as total program goals

GUIDELINE 7: The program should provide for early, continuous, sequential, and varied practicum and supervised field experiences with typically and atypically developing young children and their families.

To achieve this purpose, students completing the Program will be able to:

7.1 Demonstrate the ability to observe, analyze, plan, practice, and evaluate teaching and learning in young children with typical and atypical development

7.2 Demonstrate the ability to work with cooperating teachers and field supervisors who are well qualified and trained in clinical and field-based supervised settings

7.3 Demonstrate the ability to undertake case studies, engage in direct inquiry, participate in various forms of simulation studies, and assess and evaluate alternate patterns of early childhood settings

7.4 Demonstrate the ability to individualize educational needs for typically and atypically developing infants, toddlers, and preschoolers

7.5 Demonstrate competence in functioning in a variety of birth through kindergarten settings (e.g., hospitals, special therapeutic settings, classrooms, home environments)

GUIDELINE 8: The program should prepare B-K teachers to participate fully in interdisciplinary early childhood teams and to collaborate across agencies dealing with young children and their families.

To achieve this purpose, students completing the Program will be able to:

8.1 Demonstrate critical skills in effective communication, collaborative consultation, team building, and conflict resolution

8.2 Demonstrate knowledge of roles of professionals and parents (e.g., multidisciplinary, interdisciplinary, and transdisciplinary teams) as partners sharing observations in planning enterprise

8.3 Demonstrate knowledge of interagency relationships in early intervention

8.4 Demonstrate knowledge of systematic transition processes in transitions among settings such as hospitals, infant/toddler programs, preschools, and primary programs

8.5 Demonstrate knowledge in coordinating services written in care plans (IFSP/IEP) with parents and other professionals following the progress and adjusting objectives over time according to changing family and child needs

8.6 Demonstrate skills in initiating and conducting interdisciplinary teams

8.7 Demonstrate knowledge and competency in working with staff, assistants, and volunteers

Adopted by SBE August 6, 1992

ELEMENTARY EDUCATION

PREPARATION OF ELEMENTARY EDUCATORS

The purpose of Elementary Education is to provide developmentally appropriate learning experiences to meet the needs, capabilities, and interests of children in kindergarten through grade six. The elementary curriculum is designed to assist elementary school children in acquiring knowledge, developing skills, and forming attitudes within a learning environment focused on active involvement and relevant learning activities. The experiences, activities, and learning sequences are designed to (1) promote the development of a positive self-image and a feeling of worth; (2) foster and provide for the sound intellectual, physical, social, and emotional development of individuals in an appropriate manner at an appropriate pace; (3) develop capabilities to make decisions, form attitudes, and establish values; (4) promote an awareness of and appreciation for the environment and individuals' relationship to it; and (5) develop initiative and responsibility. A comprehensive and well-balanced elementary program is necessary for elementary school children to attain these goals.

The purpose of undergraduate Elementary Education teacher preparation programs is to develop in pre-service teachers the conceptual framework, attitudes, and entry-level skills necessary to plan and actualize developmentally appropriate classroom experiences for all elementary school children.

The undergraduate Elementary Education guidelines represent the knowledge base and program design within which the curriculum for the teacher preparation program is developed. The competencies reflect specific program areas and address the minimum entry-level requirements that the State Board of Education considers necessary for all completers of elementary Education teacher preparation programs. Guidelines and competencies I (1.1-1.12), II (2.1-2.8) and III (3.1-3.13) are generic to all elementary teachers and address the areas of human growth and development, curriculum planning and instructional strategies. Guidelines and competencies IV (4.1-4.11), V (5.1-5.16), VI (6.1-6.13), VII (7.1-7.14), VIII (8.1-8.6) and IX (9.1-9.17) address curriculum areas specific to Elementary Education, as reflected in the North Carolina Standard Course of Study.

Five graduate guidelines provide a framework within which institutions of higher education may plan programs leading to advanced certification in Elementary Education. These guidelines extend and further refine concepts reflected in the undergraduate guidelines and competencies appropriate to the level being sought and the role and function of the student seeking the certification.

GUIDELINE I **Human Growth and Development**

The Elementary Teacher Education Program should develop knowledge and understanding of the theories and principles of human growth and development and learning and their implications for providing learning environments appropriate to the needs of elementary school children. Study under this guideline should focus on the physical, cognitive, social, and emotional needs of elementary school children and the relationship between those needs and school achievement.

To achieve this purpose, students completing the Program will be able to:

1.1 Demonstrate an understanding of theories and principles of learning

1.2 Demonstrate an understanding of principles and patterns of human growth and development

1.3 Demonstrate an understanding of the physical, cognitive, social, and emotional developmental characteristics of children in grades K-6

1.4 Recognize elementary school children as individuals with feelings, attitudes, and emotions that shape their responses

1.5 Demonstrate an understanding of the impact and effect of prior experiences on cognitive development

1.6 Demonstrate knowledge of the implications of cognitive development among elementary school children, including their ability to establish personal goals, to organize information, and to assume greater control of their learning

1.7 Demonstrate an understanding of the interrelationships among self-esteem, sense of security, and school achievement and the necessity for elementary school children to develop a realistic sense of self

1.8 Observe behavior of elementary school children, discriminate among behaviors manifested, and identify patterns of growth and development

1.9 Demonstrate an understanding of factors that affect social growth

1.10 Demonstrate an understanding of ways by which elementary school children can become aware of their roles in and contributions to the classroom society, including developing an increased awareness of the rights and feelings of others

1.11 Demonstrate an understanding of guidance principles as they relate to patterns of development and behavior among elementary school children

1.12 Demonstrate an awareness of and sensitivity to children from diverse backgrounds (e.g., race, gender, socio-economic status, cultural heritage, special needs, handicapping conditions)

GUIDELINE II Curriculum Planning

The Elementary Teacher Education Program should develop an understanding of the basic principles of curriculum planning and implementation and the organizational patterns used in elementary schools. Study under this guideline should focus on the planning and implementation of a developmentally appropriate, comprehensive, integrated classroom program.

To achieve this purpose, students completing the Program will be able to:

2.1 Demonstrate the ability to use current research and theories in the planning, selecting, and sequencing of developmentally appropriate content material within the elementary curriculum (communication, mathematics, science, social studies, the arts, healthful living)

2.2 Demonstrate familiarity with and skill in the use of the North Carolina Standard Course of Study and the teacher handbooks for competency-based curriculum in planning all content area instruction

2.3 Plan and implement a developmentally appropriate interdisciplinary classroom curriculum that fosters creativity and the development of problem-solving skills

2.4 Demonstrate a knowledge and understanding of sources of curriculum (e.g., North Carolina Standard Course of Study, professional literature, curriculum guides, school expectations, the interests and needs of students, the teacher's philosophy) and the ability to use those resources to plan and implement a developmentally appropriate elementary classroom program

2.5 Plan and implement curriculum that addresses assessed needs and abilities of elementary school children

2.6 Demonstrate the ability to plan, organize, and individualize, as appropriate, living-learning environments which meet the developmental needs of elementary school children

2.7 Demonstrate the ability to plan collaboratively with resource persons and other certified teachers to maximize the effectiveness of instruction for all elementary school children

2.8 Demonstrate the ability to plan with the elementary foreign language teacher and integrate the foreign language activities into the classroom curriculum

GUIDELINE III Instructional Strategies

The Elementary Teacher Education Program should develop knowledge of learning strategies consistent with the developmental needs of elementary school children. Study under this guideline should focus on appropriate strategies that reflect proven educational practices and research.

To achieve this purpose, students completing the Program will be able to:

3.1 Demonstrate an understanding of the need to maintain a developmentally appropriate learner-centered environment throughout the elementary years

3.2 Assist elementary school children to develop healthy decision-making, problem-solving, communication, and interpersonal skills

3.3 Demonstrate competencies sufficient to teach all K-6 curricular areas

3.4 Use a variety of developmentally appropriate teaching strategies consistent with the learning styles that elementary school children are developing

3.5 Select/design and use resource materials appropriate to the elementary curricular areas

3.6 Develop teaching/learning objectives based on the needs, capabilities, and interests of elementary school children

3.7 Demonstrate the ability to prepare integrated lesson plans, units, and activities appropriate to each curricular area

3.8 Demonstrate the ability to adapt instructional strategies to accommodate elementary school children with special needs

3.9 Demonstrate an awareness of the role of the teacher and the relationships within the school and community that influence the success of the classroom program

3.10 Use current proven educational practices to evaluate classroom programs in the elementary school

3.11 Demonstrate the ability to accurately assess the competence of elementary school children using appropriate and ongoing formal and/or informal diagnostic procedures

3.12 Demonstrate the ability to use assessment findings to monitor and adjust instruction

3.13 Demonstrate general knowledge of computer technology; the ability to identify, select and evaluate developmentally appropriate computer software; and the ability to develop teaching strategies which integrate the computer into the classroom instructional program

GUIDELINE IV Communication

The Elementary Teacher Education Program should develop teachers who are knowledgeable of language/literacy research and theory and who can plan and implement classroom programs that prepare elementary school children to communicate effectively. Study under this guideline should focus on an understanding of the processes of listening, speaking, viewing, reading, and writing; the interrelatedness of all modes of communication; the acquisition and extension of those processes as they relate to the total development of the elementary school child; the integral role of quality literature; the integration of literature and the communication process throughout the curriculum; the planning of classroom programs; and the use of effective instructional practices and assessment strategies.

To achieve this purpose, students completing the Program will be able to:

4.1 Demonstrate the ability to apply current research on emerging and developing literacy to facilitate effective communication in elementary school children

4.2 Demonstrate an understanding of the elementary school child's social, cultural, linguistic, cognitive, and affective backgrounds as they relate to the ability to develop effective communication processes (listening, speaking, viewing, reading, writing)

4.3 Demonstrate a knowledge and understanding of the acquisition, development, and extension of language/literacy

4.4 Formulate and articulate a professional philosophy of language/literacy learning

4.5 Demonstrate the ability to plan a classroom program that develops communication competence and performance and is consistent with the identified professional philosophy

4.6 Demonstrate the ability to create a classroom environment conducive to the development of effective communication processes

4.7 Demonstrate the ability to plan interdisciplinary learning experiences which incorporate the communication processes and literature with other curricular areas

4.8 Use developmentally appropriate instructional practices that contribute to communication competence and performance for a variety of purposes and audiences

4.9 Demonstrate the ability to use appropriate literature and print and non-print media as a means to integrate the communication curriculum

4.10 Demonstrate a sensitivity to varying speech patterns and develop in elementary school children the ability to use Standard English in situations which require it

GUIDELINE V Mathematics

The Elementary Teacher Education Program should develop knowledge and understanding of the basic structure of mathematics, the mathematical processes and the understanding of mathematical concepts and their implications for developing learning environments appropriate to the needs of elementary school children. Study under this guideline should focus on the importance of learning through concrete and manipulative experiences and foster the development of positive attitudes toward mathematics.

To achieve this purpose, students completing the Program will be able to:

5.1 Illustrate or explain prenumeration concepts

5.2 Illustrate or explain numeration concepts

5.3 Explain the concept of fractions (including decimals) using appropriate models

5.4 Explain the concepts of rational numbers, integers, ration, proportion, and percent using appropriate models

5.5 Demonstrate the use of the usual and alternative algorithms for the four basic operations with whole numbers and with positive rational numbers (using both decimal and fractional notation)

5.6 Demonstrate the appropriate use of estimation

5.7 Illustrate through appropriate examples the relations of equality and inequality with whole numbers, integers, and with positive and negative rational numbers

5.8 Demonstrate standard (including metric) and nonstandard units in measuring length, perimeter, area, capacity, volume, weight, angle, time, and temperature

5.9 Use a variety of manipulatives to develop geometric concepts, measurement concepts, and spatial relationships

5.10 Demonstrate the ability to organize and interpret data

5.11 Demonstrate the ability to draw and interpret bar, picture, circle, and line graphs of linear and quadratic functions and relations

5.12 Demonstrate the use of appropriate mathematical terms and symbols

5.13 Demonstrate problem solving in two- and three-dimensional geometry involving parallelism, perpendicularity, congruence, similarity, translation, reflections, rotation, symmetry, and incidence

5.14 Demonstrate construction of simple geometric figures

5.15 Recognize and construct consistent and logical arguments (intuitive proofs) for mathematical statements

5.16 Serve as a model to assist elementary school children to develop positive attitudes toward mathematics

GUIDELINE VI Science

The Elementary Teacher Education Program should develop knowledge of science concepts, principles, and experiences. Study under this guideline should develop the abilities and attitudes to provide an integrated, discovery-centered, teacher-facilitated classroom science program developmentally appropriate for elementary school children.

To achieve this purpose, students completing the Program will be able to:

6.1 Demonstrate a knowledge and use of science process skills and science manipulative skills

6.2 Develop an awareness of and appreciation for the historical background of science, the rapid expansion and change of scientific knowledge, and the impact of science on society

6.3 Demonstrate knowledge of and the relationship among the biological, physical, and earth sciences and the proven practices in science education that are developmentally appropriate for elementary school children

6.4 Demonstrate an awareness of the need for conservation, preservation, and wise use of natural resources

6.5 Demonstrate a knowledge of and skill in the use of scientific instruments and the ability to construct simple science equipment

6.6 Demonstrate proficiency in using the International System of Units (SI)

6.7 Demonstrate the ability to organize, integrate, and implement developmentally appropriate K-6 science instruction that enables elementary school children to discover science concepts and principles and extend them into other subject areas and everyday life

6.8 Demonstrate a spirit of inquiry and a positive attitude toward facilitating science learning in the elementary school classroom

6.9 Use a variety of instructional methods to facilitate problem-solving, discovery, and laboratory experiences in the design of activities which will help elementary school children acquire, maintain, and extend positive science attitudes, concepts, and interests

6.10 Devise and implement units, lessons, activities, and demonstrations to illustrate scientific principles and concepts based on the needs, abilities, and interests of elementary school children

6.11 Use resources inside and outside of the school environment

6.12 Use effective questioning techniques to extend the observation and interpretation skills of elementary school children

6.13 Identify, develop, and apply problem-solving strategies involving science concepts and principles appropriate for grades K-6

GUIDELINE VII Social Studies

The Elementary Teacher Education Program should develop knowledge of and appreciation for the interplay of the social sciences with the multicultural forces in society and should develop the abilities and attitudes to provide an integrated, comprehensive classroom social studies program that reflects the role of the individual in society. Study under this guideline should focus on knowledge and understanding of the social studies concepts, generalizations, and experiences that are developmentally appropriate for elementary school children with opportunities provided for the planning of integrated cross-curricular activities using citizenship transmission, social science inquiry, and reflective inquiry to aid in the acquisition and maintenance of social studies skills, concepts, and attitudes.

To achieve this purpose, students completing the Program will be able to:

7.1 Assist elementary school children to acquire, maintain, and extend social studies skills and concepts through experiences and activities which have been developed to show the integration of the content areas

7.2 Promote interpersonal (self-management and group interaction) skills in both the design and implementation of social studies activities

7.3 Develop strategies and activities that provide elementary school children with knowledge about democratic processes within the context of a global and multicultural society

7.4 Demonstrate the use of proven instructional practices in social studies education developmentally appropriate for elementary school children

7.5 Demonstrate a knowledge of the skills, concepts, purposes, attitudes, and values of social studies (history, economics, government, geography, and sociology/anthropology) as they relate to the world, the United States, and North Carolina and contribute to effective citizenship in a complex and changing world

7.6 Analyze the relationship and interdependence between people and the changing environment

7.7 Identify and demonstrate an understanding of commonly accepted symbols, observances of our state and national heritage, and historical figures who have made contributions to society

7.8 Demonstrate a knowledge and understanding of physical, regional, and cultural geography and their effects on the relationship between people and their environments

7.9 Explain the interrelatedness of ethnic, economic, political, historical, geographical, and cultural factors in the shaping of society

7.10 Identify and apply map and globe skills that are inclusive of directionality, location, and symbolic interrelations

7.11 Demonstrate an understanding of the history, structure, and functioning of government as it exists at the local, State, and national levels

7.12 Demonstrate an understanding of the laws, rules, and regulations necessary for successful group and community living

7.13 Identify and apply problem-solving processes as they relate to social studies education

7.14 Design activities which provide for the development of skills in data collection, including locating, gathering, organizing, evaluating, analyzing, and drawing conclusions

GUIDELINE VIII Arts Education

The Elementary Teacher Education Program should present a study in arts education (Dance, Music, Theatre Arts, and Visual Arts) of sufficient depth to enable the teacher to understand what the arts are and their value, especially in relationship to the development of positive attitudes, creativity, perceptual awareness, and higher-order thinking skills. In addition, it should foster an understanding of how instruction in the arts is conducted, how the arts promote and benefit student learning, and the role the arts play in the development of world culture and society. Study under this guideline should provide the teacher with enough knowledge and skills to integrate fundamental arts instruction with other subject areas and assist with and/or extend instruction conducted by certified arts educators.

Furthermore, this study should lead to an understanding of the nature of and need for aesthetic experiences, and should include participation in the making and doing processes inherent in each of the four arts.

To achieve this purpose, students completing the Program will be able to:

8.1 Demonstrate knowledge of the necessity of the arts in the K-6 curriculum, appropriate correlation/integration of the arts with other subject areas, and the role of the arts in the development of thinking/learning skills

8.2 Demonstrate an understanding that each of the arts is an individual discipline with its own body of knowledge and means of expression

8.3 Demonstrate a knowledge of how arts education instruction is conducted and the ability to work with, support, and understand the role of the certified arts instructor

8.4 Demonstrate a knowledge of current arts texts, teacher resources, and materials appropriate for use in the K-6 classroom

8.5 Demonstrate an understanding of the basic concepts and elements in each of the four arts areas in order to assist with and/or extend instruction by a certified arts educator

8.6 Demonstrate an understanding of the creative process and its application to all areas of teaching and student learning

GUIDELINE IX Healthful Living

The Elementary Teacher Education Program should provide an appropriate study of the health, safety, and physical education needs of elementary school children and their integration within the elementary curriculum. Study under this guideline should focus on the development of attitudes, behaviors, and concepts of healthful living as they permeate the total curriculum.

To achieve this purpose, students completing the Program will be able to:

9.1 Promote physical fitness and lifetime activities

9.2 Understand and implement safety experiences and activities to develop a sense of personal worth and respect for life and property in elementary school students

9.3 Demonstrate knowledge of the following wellness determinants: (1) biological factors; (2) environmental factors; (3) personal health behaviors; (4) cognitive, emotional, and physical factors; and (5) health care systems

9.4 Plan and implement basic movement experiences and perceptual motor activities that promote proficiency in movement

9.5 Understand and use physical activities to develop positive social interaction

9.6 Understand and use cognitive concepts related to movement, the body, fitness, and safety

9.7 Demonstrate the ability to apply a knowledge of traffic, home, work, school, and recreational safety practices and procedures

9.8 Correctly identify safety hazards, assess safety risks, and make wise safety decisions in dealing with a variety of natural and man-made disasters

9.9 Demonstrate a knowledge of the determinants, distribution, frequency, severity, and prevention of intentional and unintentional injuries, diseases, and other health problems of elementary school children

9.10 Demonstrate the ability to administer first aid procedures in emergency situations

9.11 Demonstrate an understanding of nutrition, drug, alcohol and tobacco abuse, stress, and sexuality and their relationships to the health of elementary school children

9.12 Understand and implement physical education activities to facilitate the development of a positive self-concept and the ability to positively express a variety of feelings, emotions, and attitudes

9.13 Demonstrate the ability to motivate elementary school children to accept responsibility for their own emotional, physical, social, and mental health

9.14 Demonstrate an understanding of the biological, environmental, nutritional, and personal factors that determine a healthy individual

9.15 Demonstrate an understanding of the developmental patterns and characteristics of the individual as they relate to health needs and the possible development of health problems

9.16 Understand and use a variety of movement experiences that promote motor skills development in the areas of games/sports, recreational dance, and gymnastics

9.17 Demonstrate the ability to use appropriate health appraisal procedures and to recommend referral or adjustment practices where necessary

GUIDELINES FOR GRADUATE ELEMENTARY EDUCATION PROGRAMS

The program for the graduate preparation of elementary school teachers should provide flexibility to the extent that each student's program would become a planned extension of work taken at the undergraduate level, in a logical and cohesive whole leading to a master's degree and graduate certification. If a sixth year or specialist certification is sought, the program planned would be an extension of work taken at both the undergraduate and master's levels. Graduate programs should extend the breadth of knowledge and understanding demanded by the role and function of the teacher in the certification level being sought. Graduate study implies that the teacher is prepared to assume, at a higher level of competency, the professional responsibilities involved.

GUIDELINE 1: The Teacher Education Program should broaden the teacher's understanding of the purpose and role of education in the elementary grades. Study under this guideline should provide opportunities for the teacher to develop further insights into the understanding of the theoretical and philosophical bases for education practices in the elementary school, the elementary school curriculum, the interrelationship of subjects, and major curriculum movements and trends.

GUIDELINE 2: The Teacher Education Program should extend the teacher's understanding of the nature of the learner, the learning process, and the evaluation of learning. Study under this guideline should include an in-depth analysis of the concepts of educational psychology, learning theory, testing, and measurement.

GUIDELINE 3: The Teacher Education Program should assist the teacher in gaining greater insights and skills in the use of the techniques of research and in designing and carrying out research projects. Study under this guideline should include the necessary understandings and skills to develop action research in classroom situations.

GUIDELINE 4: The Teacher Education Program should provide for concentrated study in one or more of the instructional areas of the elementary school curriculum and should extend and deepen the teacher's ability to work effectively within those areas. Study under this guideline should provide the student with a usable command of concepts, understandings, generalizations, points of view, as well as the knowledge and skills necessary to provide developmentally appropriate learning environments for all elementary school children.

GUIDELINE 5: The Teacher Education Program should assist the teacher in developing the conceptual framework and skills necessary to synthesize the diversity of information and resources necessary to provide a developmentally appropriate living/learning environment for all elementary children.

Adopted by the SBE March 8, 1990

MIDDLE GRADES EDUCATION
(Grades 6-9)

A. Purpose and Nature of Middle Grades Education in the Curriculum

The purpose of Middle Grades Education in North Carolina is to educate students effectively in grades 6-9, in accord with the North Carolina Standard Course of Study, K-12, and the Teacher Handbook for competency-based curriculum. The skills and concepts outlined in these documents are those which can reasonably be expected to be mastered by most students. However, the curriculum and methods of presentations must be varied, taking into consideration the wide range of ability levels, different learning styles, and diverse developmental needs present in all classrooms. Middle Grades Education attempts to organize the curriculum appropriately in order to teach students academic and personal skills and concepts which are essential to successful living in a complex society.

The Middle Grades program must provide a transition for students from Intermediate to Secondary experiences. Opportunities must exist for students to explore content areas through concrete and abstract cognitive processes. The program should emphasize self-directed learning to help students achieve increasing independence and must incorporate an appropriate balance of teacher-directed and student-directed learning activities.

It is essential that educators utilize a knowledge of the physical, cognitive, and affective developmental characteristics and needs of middle grades students as they plan appropriate programs and instructional activities. Programs and activities must help students integrate the basic skills and concepts from various content areas in a way which increases knowledge and promotes the concept of life-long learning. These programs must allow for the exploration of the many roles open to productive citizens in a complex society. Middle Grades programs should contain components characteristic of Elementary and Secondary Education, when appropriate, yet guarantee a unique program based on what is known about the special needs of this age group.

B. Guidelines for Preparing Teachers in Middle Grades Education (6-9)

GUIDELINE 1: The program should provide prospective middle grades teachers with training and experiences that investigate the influences of physical, social, cognitive, and affective development on the growth and achievement of students in grades 6-9.

Factors which must be observed, explored, and assessed should include: variable growth and behavior patterns in this age group; transition from concrete to abstract thought processes; the identity formation process; factors affecting self-esteem; peer influence on school achievement; media stereotypes; isolation from the adult world; failure of society to define a meaningful role for this age group; moral development; realistic learning expectations; and appropriate guidance activities for the age group. Ways to incorporate these factors into curriculum development must be emphasized.

GUIDELINE 2: The program should provide prospective middle grades teachers with training and opportunities to demonstrate in-depth knowledge of at least one content area relevant to the curriculum in grades 6-9, as well as functional proficiency in the basic skills areas of listening, speaking, reading, and writing.

Study under this guideline must include sufficient preparation in a content area relevant to the curriculum in grades 6-9 to enable the prospective teacher to demonstrate competencies required for concentration certification. These concentrations may be chosen from the following: Communication Skills, Mathematics, Science, and Social Studies.

GUIDELINE 3: The program should provide prospective middle grades teachers with training and experiences in organizing a balanced instructional program for students in grades 6-9, as defined in the Course of Study for Elementary and Secondary Schools.

Elements of these programs will be taken from: academic disciplines; practical and fine arts; health, safety, and physical education; exploratory courses built around special interests and needs; utilization of community resources in instruction; interdisciplinary study; and developmental reading, including vocabulary development and word attack skills; and comprehension applied to specific content areas.

GUIDELINE 4: The program should provide prospective middle grades teachers with training and opportunities to demonstrate proficiency in a wide variety of teaching methodologies appropriate to the students and programs in grades 6-9.

These methodologies must include use of techniques such as differentiated learning activities applied to diagnosed student needs; whole group, small group, and individualized techniques; appropriate concrete and manipulative materials; learning centers; learning contracts; project work; independent study; inquiry; brainstorming; simulations; learning games; lecture; class discussions; community based learning; team teaching; interdisciplinary teaching; and using the arts as catalysts for learning.

GUIDELINE 5: The program should provide prospective middle grades teachers with opportunities to demonstrate appropriate skills in classroom management.

These include the ability to create a positive climate for learning; to organize and use instructional time effectively; to build a sense of community; to manage student behavior; and to foster student self-discipline and cooperation.

GUIDELINE 6: The program should provide prospective middle grades teachers with the ability to evaluate the effectiveness of teaching methods used in accomplishing the goals of the program in grades 6-9 and to help students assess their own progress.

Study under this guideline should familiarize prospective teachers with currently acceptable evaluation measures, including instrumentation and processes recognized as effective in assessing the effectiveness of classroom methodology.

GUIDELINE 7: The program should provide prospective middle grades teachers with training and opportunities to demonstrate a knowledge of the foundational components of the middle grades program.

Study under this guideline should provide a general knowledge about contemporary and historical issues involved in the establishment of middle and junior high schools. The various organizational patterns used in grades 6-9 and the advantages/disadvantages of each should be explored. Each prospective teacher must be made aware of the rationales for the following program components: interdisciplinary team teaching; flexible block scheduling; advisor/advisee programs; exploratory experiences; and multi-age grouping.

GUIDELINE 8: The program should provide appropriate subject concentration for prospective middle grades teachers.

Study under this guideline should provide appropriate concentrated work in at least one area of study included in the middle grades curriculum such as the following: communication skills; social studies; mathematics; science. A second area of concentration may be in one of the aforementioned areas or in other areas such as reading, exceptional children, or another area of study relevant to the North Carolina Standard Course of Study for grades 6-9.

GUIDELINE 9: The program should provide prospective middle grades teachers with opportunities to demonstrate personal competencies which are compatible with the developmental levels and needs of students in grades 6-9.

Study under this guideline must include exploration of appropriate student-teacher relationship patterns. Opportunities must be provided for the prospective teacher to demonstrate flexibility in dealing with the developmental changes of this age group. It is imperative that all prospective teachers demonstrate an interest in and a commitment to teaching the student in grades 6-9.

C. Competencies Needed by Teachers to Achieve Program Objectives

NOTE: Competencies identified by an asterisk are required for an endorsement to a certificate

1.0 Human Growth and Development

- 1.1 Assess the implications of physical development, including variable growth and behavior patterns and their short and long term psychological effect on personal development and achievement
- 1.2 Analyze the implication of cognitive development, including the potential transition from concrete to abstract thought processes, for personal development and achievement
- 1.3 Analyze the implication of socio-emotional development, including the identity formation process, factors which influence self esteem, and the importance of peer influences in relation to school achievement
- 1.4 Recognize social forces which affect young adolescents and their implications, including media stereotypes, isolation from the adult world, and general societal neglect

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1.5 Analyze the process of moral development, including the effects of societal confusion and lessened parental influence as they relate to the role of middle grades education in our society

*1.6 Demonstrate realistic learning expectations for the stages of growth present among 11-14 year olds

*1.7 Integrate basic guidance activities related to the unique patterns of development and behaviors for the 11-14 year old into the instructional program

2.0 Curriculum Development and Teaching Methodology

*2.1 Demonstrate competencies in one or more academic concentrations relevant to the curriculum in grades 6-9 (two concentrations are strongly suggested)

*2.2 Conceptualize instructional programs based on needs identified by diagnostic techniques, incorporating important factors which affect young adolescents, such as developmental characteristics, cross cultural data, mass media influences, and health issues

2.3 Demonstrate an understanding of the arts, including the relationships of music, visual arts, dance, and theater arts and ways in which they may serve as catalysts for learning

2.4 Utilize appropriate teaching and learning strategies, approaches, and theories which challenge students to think

*2.5 Demonstrate teaching methods which utilize activities for large groups, small groups, and individuals

*2.6 Develop and implement interdisciplinary units of instruction that foster creativity and the development of problem-solving skills

*2.7 Utilize a variety of instructional techniques and materials such as learning centers, learning contracts, projects, independent study, inquiry, brainstorming, simulations, learning games, lectures, class discussions, questioning, and manipulatives

2.8 Integrate classroom management and interpersonal skills to create a sense of community and foster self discipline and cooperation

2.9 Evaluate the effectiveness of teaching methods utilized

2.10 Design mini-courses or other types of specific, short courses related to student interests

2.11 Utilize community resources inside and outside the school which provide service opportunities.

2.12 Apply teaching strategies that address developmental reading skills, such as vocabulary development, comprehension, and word attack skills

2.13 Provide opportunities and guidance to help students become independent learners (e.g., define own goals and problems, identify resources, evaluate outcomes)

3.0 Foundations

3.1 Demonstrate knowledge of contemporary and historical issues involved in middle grades education, especially those involved with the establishment of middle and junior high schools

3.2 Assess the various organizational patterns used in schools containing grades 6-9

3.3 Present a rationale for major components of middle grades education including interdisciplinary team teaching, flexible block scheduling, adviser/advisee programs, exploratory programs, and multi-age grouping

3.4 Understand basic general principles of curriculum and learning theories

4.0 Personal Competencies

*4.1 Demonstrate functional proficiency in the basic communication skills, including listening, speaking, reading, and writing

*4.2 Foster student-teacher relationship patterns which are compatible with the developmental levels and needs of students

*4.3 Demonstrate flexibility in dealing with the developmental changes of young adolescents

*4.4 Demonstrate an interest in and commitment to the student in the age group 11-14

GUIDELINES FOR GRADUATE MIDDLE GRADES PROGRAMS

The program for the graduate preparation of middle grades teachers should provide flexibility to the extent that each student's program would become a planned extension of work taken at the undergraduate level, in a logical and cohesive whole or five years of study leading to a master's degree. If a sixth year of preparation is involved, the planning would be on the basis of an extension of work taken at both the undergraduate and fifth-year levels. Graduate programs should extend the breadth of knowledge and understanding demanded by the role and function of the teacher in the certification level being sought. Graduate study implies that the teacher is prepared to assume at a higher level of competency the professional responsibilities involved.

Approximately 40 percent of the graduate program should be devoted to preparation required in Guidelines 1 through 4 and approximately 40 percent to that required by Guideline 5. The remainder of the program should be in areas that would add to the general competency of the individual.

GUIDELINE 1: The program should broaden the teacher's understanding of the purpose and role of education in the middle grades.

Preparation in this area should provide opportunities for the teacher to develop further insights into the understandings of the theoretical and philosophical bases for practices in education and the middle grades curriculum, interrelationship of subjects, and major curriculum movements and trends.

GUIDELINE 2: The program should extend the teacher's understanding of the nature of the learner and learning process.

Preparation in this area should include an in-depth analysis of the concepts of educational psychology, learning theory, goal orientation, conditioning, and rational processes; concepts of measurement and testing, including construction, use, and interpretation of teacher-made and standardized tests and other instruments for appraising personality, attitude, and adjustment; and statistical analysis and interpretation.

GUIDELINE 3: The program should assist the teacher in gaining greater insights and skills in the use of the techniques of research and in designing and carrying out research projects.

Preparation in this area should include the necessary understandings and skills to develop action research in classroom situations.

GUIDELINE 4: The program should extend and deepen the teacher's ability to work effectively with the content areas of the school curriculum.

Study should provide the student with a usable command of concepts, understandings, generalizations, and points of view, as well as knowledge and skills that apply to the various areas of the curriculum. Individualization of program planning should be directed toward extending and deepening the student's ability to work effectively with the subject content at the appropriate level.

GUIDELINE 5: The program should provide for concentrated study in one or more of the instructional areas of the school curriculum.

At the middle grades level, provision for concentrated study in a selected instructional area of the middle grades school or in a combination of academic fields should be provided.

Completion of Program

The fifth-year program should lead to the master's degree. When a sixth-year program is involved, the institution should grant appropriate recognition for completion of the program.

Recommendation of Institution

Each candidate for a certificate must be recommended by the appropriate college official(s). The recommendation must certify the completion of the master's degree level, sixth-year level, or doctoral-level program and must be accompanied by supporting transcript(s) or credit(s).

COMMUNICATION SKILLS
(Grades 6-9)

A. Purpose and Nature of Communication Skills in the School Curriculum

The ability to communicate effectively is essential for survival in a rapidly changing world--a world of altered values and life styles created by increased knowledge and technology. Man's language is the means by which he establishes his relationship with his fellow man and his environment. It embodies responses to human experiences involving value judgement and the assumption that human life has meaning. Therefore, the aim of communication skills instruction in grades 6-9 and English instruction in grades 9-12 is to create literate citizens who can experience life through literature; who can internalize and extend experiences through oral, written, and visual composition; and who can share their encounters with life through the use of language as they interact with people.

Communication skills is a study of the processes of communication using verbal and non-verbal symbols. Traditionally, Language Arts has been concerned with the verbal aspects of language, literature, and composition. Communication skills instruction today, however, is broadening the conventional understandings of these three areas, anticipating increased emphasis on non-verbal communication. All five skill areas--reading, writing, listening, speaking, and viewing--are important for effective communication. At every level of instruction, kindergarten through grade twelve, communication skills is an integral part of the school curriculum.

B. Guidelines for Preparing Teachers in Communication Skills Education

The program of preparation for the prospective teacher of communication skills should be based upon an understanding of adolescent growth and development as they apply to the acquisition of communication skills. Utilization of an integrated approach to the development of communication skills and the application of these skills to content area instruction should be included in a concentration that comprises approximately 15 to 20% of the undergraduate studies, planned in accordance with the following guidelines:

GUIDELINE 1: The professional studies program should relate adolescent development to the principles of teaching and learning communication skills.

Study under this guideline should provide the knowledge necessary for the understanding of adolescent behavior in relation to the factors of age, sex, cultural backgrounds, socio-economic and physiological characteristics, and their implications for effective living-learning environments.

The program should provide a working knowledge of (1) the general principles of human growth and development - intellectual, physical, emotional, and social, (2) the basic principles of theory and learning and their implications for the adolescent teaching/learning situation, (3) the wide range of differences in developmental patterns of students, and (4) the influences of economic, sociological, and psychological factors on development.

GUIDELINE 2: The professional studies program should provide an integrated approach to the study of the skills of reading, writing, speaking, viewing, and listening; develop sensitivity to and appreciation of literature; and develop the prospective teacher's ability to expand the students' competencies in these areas.

In the area of communication skills instruction, the preparation should be sufficient to give the teacher a thorough understanding of the processes included in reading, writing, listening, speaking, and viewing. In addition, diagnostic procedures, corrective techniques, various approaches to the teaching of these processes, and methods to modify instruction to accommodate various levels of achievement and rates of progress should be included. Preparation in literature, as the vehicle for the application of these skills, should extend the teacher's understanding of the literary tastes and interests of young people and should focus on emphasizing the exploration, enjoyment, and understanding of a variety of media, rather than on the formal elements of literature.

GUIDELINE 3: The professional studies program should provide preparation in a variety of classroom organization and management systems, methods, strategies, techniques, materials, and technology appropriate for adolescent education.

Study under this guideline should focus on designing learning environments for the adolescent, with particular emphasis on developing effective communication skills instruction. Specifically, it includes study in the following areas: (1) organizing and managing learning; (2) evaluating effectiveness of instructional methods, strategies, and techniques in helping students assess their own progress; (3) selection, preparation, and creative use of multi-media and technology; and (4) using appropriate community resources.

GUIDELINE 4: The professional studies program should instruct the prospective teacher in identifying, developing, and coordinating the application of communication skills to other content areas.

Study under this guideline should provide training and experiences in applying the communication skills to other content areas. Activities may include opportunities to utilize reading, writing, speaking, viewing, and listening in a variety of content areas relevant to the curriculum in grades 6-9, as defined by the North Carolina Standard Course of Study.

GUIDELINE 5: The professional studies program should provide a study of the contemporary issues and trends in education within a historical, philosophical, and sociological framework.

Content in this area should promote an understanding of the role of: the school as an institution in a rapidly changing society; philosophies of education; the influence of government and the social environment; and the implications of these elements for the communication skills program. The need for a closer working relationship between school and community should be emphasized.

GUIDELINE 6: The program of preparation should develop an individual awareness of the importance of continuing education and professional development.

Study and experiences under this guideline should assure prospective candidates an opportunity to internalize and demonstrate a commitment to continued learning in the communication skills content area(s), as well as the skill of teaching. Experiences with professional organizations, research, staff development, professional writing, and professional conferences are appropriate.

C. Competencies Needed by Teachers to Achieve Program Objectives

Content and Overall Knowledge: In order to carry out the objectives of the curriculum in grades 6-9, the teacher of communication skills should possess a knowledge of the following:

1.0 Language (how language functions in reading, writing, listening, speaking, and viewing): The teacher will demonstrate an adeptness in the processes of both producing and understanding oral and written communication and non-verbal language by being able to:

1.1 Demonstrate a working knowledge of standard grammar and usage

1.2 Demonstrate an understanding of how communication varies according to purpose, audience, and occasion

1.3 Demonstrate an understanding of literal, interpretive, and critical comprehension

1.4 Demonstrate a knowledge of the acquisition of language and the psychological and sociological contexts of language use

1.5 Demonstrate a working knowledge of the most esteemed notions about writing instruction and evaluation

2.0 Literature (reading materials)

2.1 The teacher will demonstrate familiarity with a wide variety of literature which is especially appropriate for children and adolescents

3.0 Instructional Techniques (how to enable students to employ effectively the communication skills of reading, writing, listening, speaking, and viewing): The teacher will demonstrate:

3.1 An awareness of successful techniques for acquiring and developing the communication skills in students

3.2 The ability to develop innovative learning plans based on proven techniques

Professional Skills/Techniques/Methodologies: In order to carry out the objectives of an integrated curriculum, the teacher will demonstrate the ability to diagnose the needs of students and design and execute appropriate teaching activities which enable those students to develop effective thinking and communication skills in the following areas:

4.0 Reading (extracting meaning from the printed page): The teacher will:

4.1 Facilitate following written directions

4.2 Promote the various aspects of vocabulary development

4.3 Aid recognition of organizational patterns within written materials

4.4 Enhance understanding through various levels of comprehension

4.5 Promote the appreciation of literature and an understanding of the various genres through careful work with literary texts

4.6 Stress cultural literacy as well as functional literacy

5.0 Writing (communicating through the written word): The teacher will:

5.1 Set a good example through effective writing practices

5.2 Promote the various aspects of pre-writing, including identifying a purpose, determining the audience, selecting an appropriate form, and organizing

5.3 Utilize pre-writing plans, appropriate grammar, and suitable usage to produce a draft

5.4 Apply the principles of editing to a draft to prepare it for revision

5.5 Aid student self-evaluation to determine strengths and weaknesses

5.6 Develop techniques for engaging the entire class in cooperative writing experiences

5.7 Promote the various aspects of writing based on research

5.8 Facilitate the ability to write speeches for oral presentation

6.0 Speaking (communicating orally): The teacher will:

6.1 Set a good example through effective speech practices and body language

6.2 Diagnose and reduce problems in speech practices and body language in students

6.3 Enable students to apply the major components of oral composition

6.4 Enable students to vary oral communication according to purpose, audience, and occasion

6.5 Demonstrate effective use of group discussion skills

6.6 Promote an awareness and acceptance of varying speech patterns

7.0 Listening (extracting meaning from the spoken word): The teacher will:

7.1 Facilitate the distinguishing of sounds

7.2 Develop the students' ability to listen for a purpose (literal, interpretive, critical, creative)

7.3 Develop the students' ability to listen with understanding, appreciation, and enjoyment

8.0 Viewing (extracting meaning from non-print media): The teacher will:

8.1 Provide an understanding of visual communication through interpretation of images and visual symbols

8.2 Demonstrate familiarity with a wide variety of film types such as features, documentaries, and animated non-print media

8.3 Provide opportunities for the development of taste and selectivity viewing

8.4 Provide an understanding of propaganda techniques and the importance of mass media

8.5 Provide an understanding of critical thinking through the visual process

Professional Values

9.0 In order to promote communication skills in the classroom, school, and community, the teacher will:

9.1 Participate appropriately in the development of the curriculum, in both decision-making and advisory capacities

9.2 Recognize the relationship between students' learning of language, both oral and written, and the social, cultural, and economic conditions within which they are reared

9.3 Serve as a model for correct and effective use of communication

10.0 In order to maintain high personal professional standards, the teacher will:

10.1 Stay informed of current trends in communication skills through in-service training and professional publications

10.2 Maintain affiliation with professional organizations

The following competencies are considered desirable in enriching the knowledge and skills of the teachers and, as such, exceed minimum competency expectations

11.0 Content and overall knowledge: The teacher will demonstrate a working knowledge of:

11.1 Foreign language(s)

11.2 Other subject areas such as philosophy, psychology, history, geography, art history, music history, film history, and production

12.0 Professional Skills/Techniques/Methodologies: In order to plan for more effective instruction, it is desirable that the teacher be able to:

12.1 Apply journalistic principles and practices

12.2 Demonstrate dramatic techniques

12.3 Implement forensic methods

13.0 Computer Competencies (Level II)

13.1 All Communication Skills teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Communication Skills education by:

13.1.1 Exhibiting a working knowledge of computer technology

13.1.2 Being prepared to set up a computer terminal

13.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

13.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

13.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

13.2 Communication Skills teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

13.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

13.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, data collecting

13.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Communication Skills Program (CAI) relative to the areas of Listening, Speaking, Reading, Writing, Viewing

13.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

13.3 The Communication Skills teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

13.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, etc.

13.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Communication Skills experiences

13.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

13.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

MATHEMATICS
(Grades 6-9)

A. Purpose and Nature of Mathematics Instruction in the Curriculum

Mathematics, like other subjects in the school curriculum, should satisfy a portion of the need of each individual to possess some control over his destiny. Specifically, the goal of mathematics education is to aid each individual in adjusting more satisfactorily to his physical, mental, and social environment by helping him/her to:

> Develop a mathematical literacy which will assist him/her in making wise decisions as a producer and/or consumer of products and services
>
> Use the words, symbols, and techniques of mathematics with precision so that he/she will be able to solve problems and to communicate ideas correctly and clearly
>
> Experience the satisfaction of mathematical discovery from which will evolve curiosity, initiative, confidence, and interest in mathematics
>
> Comprehend how mathematics contributes to the analysis of events that occur in the physical world
>
> Understand the contribution of mathematics to man's social, economic, philosophic, and artistic heritage
>
> Develop patterns of reasoning which will enable him/her, when confronting new situations, to invent mental representations, to formulate abstractions, to put forward hypotheses, to gather evidence, to verify conjectures, to draw inference, and to construct arguments

The school mathematics program is currently structured to achieve the above goals. Mathematics is presented in a sequential manner beginning at the elementary education level and continuing through the secondary school. In the early years (K-6), the student is exposed to the concept of quantity from which numerical operations involving whole, fractional, and decimal numbers are developed. In addition, he/she is taught many of the elementary ideas of geometry, measurement, and problem solving.

In grades 6-9, the ideas developed earlier are extended to include operations with the set of real numbers. At this level many students exhibiting a special competency in mathematics are enrolled in a curriculum which provides greater challenge and which enables them to work at a more abstract level in high school. The curriculum is structured to provide every student with learning experiences that not only challenge him/her, but also enable him/her to achieve a reasonable degree of success.

The high school mathematics curriculum (grades 9-12) provides for a variety of interests and needs. For students having a high aptitude in mathematics, courses in Algebra I, Geometry, Algebra II, and Advanced Mathematics are offered. In some schools this program is enriched by such courses as Calculus, computer-related mathematics, and consumer mathematics. The program is often strengthened through the inclusion of other courses in which the emphasis is on the applications of mathematics.

B. Guidelines for Preparation of Middle Grades Mathematics Teachers

The program should include courses in mathematics and the teaching of mathematics which constitute approximately 27-30 semester hours in a four-year program, planned in accordance with the following guidelines.

GUIDELINE 1: The program should take into consideration the logical and sequential nature of mathematics, its structure and interrelationships, the universality of its contributions to culture.

The program for the preparation of mathematics teachers should give emphasis throughout the total program to the logical nature of mathematics and the universality of its applications; to the basic concepts of mathematics, initially formulated in possibly an abstract manner and given substance by concrete application to the solution of real-life problems; to the unity of mathematics which is separated into discrete disciplines for study purpose only; and to an understanding of the role of mathematics in the development of society.

GUIDELINE 2: The program of mathematics should include an in-depth study in those areas of mathematics having maximum relevance to the middle grades curriculum.

It is essential that the prospective teacher of middle grades mathematics be aware of and skilled in dealing with basic concepts and currently valid viewpoints of arithmetic, algebra, geometry, probability/statistics, trigonometry, and analysis.

The study of arithmetic should make the prospective teacher aware of the structure of the base-ten number system and how the various computational algorithms are derived from this structure; and include an in-dept examination of the rational numbers (including decimals), integers, ratio, proportion, and percent.

The geometry in the program should include a critical study of Euclidean geometry. This work should provide the prospective teacher with both an intuitive and formal examination of this area of mathematics

The probability in the program should include an intuitive discussion of the axiomatic nature of the topic and provide opportunities for problem solving.

The work in statistics should include experiences with both descriptive and inferential statistics.

This study of trigonometry should emphasize the notion that the trigonometric functions have special properties; can be graphically displayed; and can be used to solve practical problems.

GUIDELINE 3: The program should include further work in mathematics designed to broaden the student's perspective of the various branches of mathematics.

This work may be in one or more of the areas listed under Guideline 2 and/or work chosen from offerings in mathematics such as set theory, logic, number theory, topology, geometry, finite mathematics, and calculus.

GUIDELINE 4: The program should include experience with the field of computing as it relates to mathematics and the teaching of mathematics

The program should provide experiences in which the computer is used to carry out such algorithms as the determination of solutions for a quadratic equation or the evaluation of lower and upper approximations for the area under a curve.

GUIDELINE 5: The program should include work in areas related to mathematics.

The study should include work in related areas, such as science and the social sciences, in which problems are solved by means of mathematical ideas and methods in pursuit of a solution and the interpretation of results in light of the initial problem.

GUIDELINE 6: The program should include instruction in the use of methods, materials, and equipment specifically related to the teaching of mathematics.

The preparation should include a study of the present-day objectives of mathematics education and develop an understanding of methods and techniques suitable for attaining those objectives. It should develop knowledge of and skills in the use of educational media appropriate for teaching-learning in mathematics.

GUIDELINE 7: The program should develop an awareness of the need and the disposition for continued learning in the field of mathematics and the teaching of mathematics.

The program should develop within students the attitude that learning mathematics is exciting and rewarding, and that studying to keep abreast of new developments in mathematics, its applications, and its pedagogy, must be a lifetime professional commitment for the teacher. Avenues open for further professional development include in-service education, independent study, and formal graduate study.

C. Competencies Needed by Teachers to Achieve Program Objectives

NOTE: Competencies identified by an asterisk are required for an endorsement to a certificate

Mathematical Content

1.0 Knowledge of Algebra

- *1.1 Demonstrate that the set of Real Numbers consists of the set of Rational Numbers and the set of Irrational Numbers
- *1.2 Use the field and order properties to solve problems involving Real Numbers
- *1.3 Perform computations on the set of Real Numbers including absolute values
- *1.4 Solve linear equations
- *1.5 Write the equation of a line given two points on the line, or given one point on the line and the slope of the line

*1.6 Graph a linear equation in two variables by using one of the following: (1) slope and y-intercept, (2) both intercepts, (3) point and slope, (4) set of points

*1.7 Solve word problems whose solutions depend upon a knowledge of inequalities

*1.8 Solve and graph linear inequalities

*1.9 Use the major kinds of variation including direct, indirect or inverse, joint, and combined to solve problems

*1.10 Solve and graph a system of linear equations

*1.11 Solve and graph a system of linear inequalities

*1.12 Add, subtract, multiply, divide, and factor polynomials

*1.13 Use the Remainder Theorem, Factor Theorem, and synthetic substitution to evaluate a polynomial for any real number

1.14 Apply the Rational Root Theorem to polynomial equations to find rational roots

*1.15 Know that a rational expression is the quotient of two polynomials $P_1 \div P_2$ where P_2 is not the zero polynomial

1.16 Solve problems whose solutions depend upon a knowledge of rational algebraic expressions

1.17 Know the properties of equality (e.g. reflexive, symmetric, transitive, additive, multiplicative)

1.18 Solve and graph equalities containing absolute values

*1.19 Recognize the general form of a quadratic equation in two variables (e.g. $ax^2 + bx \div c = 0$; $y = ax^2 + bx + c$)

*1.20 Solve quadratic equations by factoring, completing the square, using the quadratic formula, and graphing

1.21 Determine the nature and number of the roots of a quadratic equation by using the discriminant

*1.22 Solve word problems whose solutions depend upon a knowledge of equations

1.23 Graph an equation to determine if it has complex roots

1.24 Distinguish between a sequence and a series

*1.25 Find arithmetic and geometric means

1.26 Find the sum of the first n terms of an arithmetic or a geometric series

1.27 Name the sum indicated by n terms of an arithmetic or a geometric series

1.28 Express a series in either summation notation or expanded form

1.29 Find missing terms in arithmetic or geometric sequences

1.30 Find the nth term of an arithmetic or geometric sequence

1.31 Generate arithmetic or geometric progressions for given conditions

1.32 Express the Binomial Theorem in both summation (combinatorial) notation and expanded polynomial notation

*1.33 Complete the pattern exhibited by the coefficients and exponents when binomials are expanded

*1.34 Know relationships between the coefficients in the binomial expansion and Pascal's triangle

*1.35 Use the Binomial Theorem to expand binomials

1.36 Find the nth term of a binomial expansion

1.37 Use knowledge of the Binomial Theorem to solve problems (e.g. probability, genetics)

1.38 Perform operations with complex numbers

1.39 Use the Fundamental Theorem of Algebra to determine the zeroes of a polynomial

1.40 Use the principle of mathematical induction to prove statements

1.41 Determine if a series converges of diverges

1.42 Solve problems involving matrices and determinants

2.0 Knowledge of Euclidean geometry

*2.1 Know that many mathematical systems, including geometrical systems, may be described in the following two ways: (1) a mathematical system consists of (a) undefined terms, (b) defined terms, (c) postulates and (d) theorems, or (2) a mathematical system consists of (a) a set of elements, (b) one or more well defined operations, (c) an equivalence relation, and (d) a set of postulates

*2.2 Define commonly used terms related to the study of the point, line, plane, and space

*2.3 Know the theorems, definitions and terms related to line segments

*2.4 Define parallel, perpendicular, skew, and intersecting lines

*2.5 Classify by name closed geometric figures in a plane and in space

*2.6 Use the postulates and theorems dealing with an angle (e.g. an angle has exactly one bisector; every angle corresponds to a unique real number x, such that $0 < x < 180$)

*2.7 Establish the relationship between angles (e.g. supplementary, complementary, linear pair, vertical, interior, exterior)

*2.8 Develop a geometrical argument using the indirect or direct method of proof

*2.9 Know the theorems and properties related to the perpendicularity of lines, planes, and lines to planes

*2.10 Use the theorems that establish the parallel relationship between lines and/or planes (including alternate interior angles, corresponding angles, proportional segments on transversals)

*2.11 Use the congruency theorems to prove triangles congruent and in other multi-stage proofs

*2.12 Know the triangle inequality theorems, and the relationships between sides and angles

*2.13 Use knowledge of the triangular inequality theorem to solve problems involving triangles

*2.14 Apply theorems concerning inequalities in two triangles, "Hinge Theorem", and its converse

*2.15 Use the Pythagorean Theorem to solve problems

*2.16 Know the conditions that must be established to demonstrate similarity between geometric figures

*2.17 Use knowledge of similar polygons to find the measure of the unknown side of one of the figures

*2.18 Know terms associated with proportion (e.g. means, extremes, mean proportional, terms of a proportion, constant of proportionality)

*2.19 Use knowledge of proportion to solve problems

*2.20 Find the perimeter and area of polygons

*2.21 Know that corresponding to any two points A and B in a given coordinate system there is a unique positive number called their distance

*2.22 Prove some of the theorems of Euclidean Geometry by analytic methods

*2.23 Use analytic (algebraic) techniques to determine when two or more lines are parallel, perpendicular, coincide, or intersect

*2.24 Use the distance formula to solve problems

*2.25 Determine the slope of a line

*2.26 Find the point which divides a line segment into a desired ratio

*2.27 Use the theorems regarding circles in proofs and application problems

*2.28 Make basic geometric constructions

*2.29 Know that the altitudes, medians, and angle bisectors of a triangle are concurrent, and know the relation of the point of concurrency to the sides and vertices of the triangle

*2.30 Describe the locus (characterization of points) that satisfies one or more given condition

*2.31 Use theorems relating to the measures of angles of polygons

*2.32 Find the surface area and volume of geometric figures

*2.33 Demonstrate a thorough knowledge of the synthetic approach to Euclidean plane geometry including work with congruence, similarity, area, and geometric constructions with an emphasis on both theory and application

*2.34 Use the fundamentals of Euclidean solid geometry, including work with volumes, surface areas, and solid angles

*2.35 Understand the historical and mathematical significance of the Parallel Postulate including an introduction to a non-Euclidean geometry

3.0 Knowledge of elementary number theory and the fundamental structures of modern algebra - groups, rings, and fields

*3.1 Understand elementary number theory including modular arithmetic, Fundamental Theorem of Arithmetic, and the basic theorems pertaining to primes, composition, multiples, and divisors

*3.2 Use knowledge of rational (fractional) numbers to solve problems

*3.3 Show that between any two rational numbers there is always another rational number

4.0 Knowledge of probability as a mathematical system of random variables and their distributions, and of basic topics in statistical inference

*4.1 Understand the axiomatic approach to probability

*4.2 Compute probabilities in finite systems

4.3 Apply the binomial, normal, and student distributions

4.4 Estimate means and test statistical hypotheses involving problems arising in the social and natural sciences

4.5 Solve probability problems using the basic laws of probability (e.g. independent events, sample spaces, conditional probability, mathematical expectation, and random variables)

*4.6 Calculate the means, median, and mode of a set of numerical data

*4.7 Construct graphs to represent numerical data

4.8 Compute the variance and standard deviation of a set of numerical data

*4.9 Use the Fundamental Counting Principle

*4.10 Use the Multiplication Principle to determine the number of ways two events can occur

*4.11 Determine the odds of an event occurring when given sufficient data

4.12 Determine the permutations of n things taken r at a time

4.13 Find the permutations of n things not all different

4.14 Solve combinations

*4.15 Use the Addition Principle to determine the probability of an event

4.16 Distinguish between samples and populations

4.17 Determine if a sample is representative of a given population

4.18 Identify a stratified random sample

4.19 Determine how the size of a sample influences the manner in which it behaves like the population

4.20 Solve problems involving the Standard Normal Distribution

4.21 Determine the correlation coefficient between two variables

5.0 Knowledge of Plane Trigonometry

- 5.1 Solve triangles; use the Laws of Sines, Cosines, and Tangents; solve trigonometric equations and verify trigonometric identities
- 5.2 Demonstrate a thorough knowledge of the trigonometric functions and their properties
- 5.3 Determine the characteristics of the trigonometric functions (e.g., period, amplitude, phase shift)
- *5.4 Sketch the graphs of trigonometric functions
- *5.5 Define trigonometric functions of an angle in terms of a right triangle or a point in the coordinate plane
- *5.6 Express angular measure in either degrees or radians
- 5.7 Define the sine and cosine functions by using the wrapping function and the unit circle
- *5.8 Give domain and range of each circular function
- *5.9 Know that the trigonometric functions and the circular functions of real numbers are related through the radian measure of angles
- 5.10 Know definitions for the inverse relations and for the inverse of the circular (trigonometric) functions including the notation
- 5.11 Give domain and range for the inverse relations and the inverse of the trigonometric functions
- *5.12 Use a table of values of trigonometric functions to choose the desired approximation of a function for a given angle or real number or vice versa
- *5.13 Apply trigonometry to solve problems (e.g., carpentry, navigation, surveying, electronics, building construction)
- *5.14 Use calculators or computers to aid in the solution of trigonometry problems
- 5.15 Find the value(s) of the inverse relations and inverse of the trigonometric functions
- 5.16 Graph the inverse relation and the inverse of the trigonometric functions
- 5.17 Use trigonometric functions with complex numbers
- 5.18 Represent a complex number in standard form, polar form, vector form, ordered pair, and exponential form

5.19 Show the graphic representation of a complex number

5.20 Use DeMoivre's Theorem to find roots and powers of complex numbers

6.0 Familiarity with the fundamental concepts and techniques of linear algebra

6.1 Know that vectors are directed line segments used to represent quantities having magnitude and direction

6.2 Use terminology related to vector, (e.g., origin, initial point, terminal point, unit vector, zero or null vector, vector space, scalar)

6.3 Use symbolism common to vectors

6.4 Determine if vectors are equivalent

6.5 Know that a vector is a real number

6.6 Use the properties of a vector multiplied by a scalar

6.7 Know that a nonzero vector $\vec{a}$ is parallel to a nonzero vector $\vec{b}$ if and only if vector $\vec{a}$ can be expressed as a scalar multiple of vector $\vec{b}$

6.8 Know that the sum (resultant) of two vectors is a uniquely determined vector

6.9 Add and subtract vectors

*6.10 Represent addition and subtraction of vectors graphically

*6.11 Find the inner (dot) product of two vectors

6.12 Know that the inner product (dot product) of vectors has commutative, associative, distributive, and substitution properties

6.13 Find the norm (magnitude) of a vector

6.14 Use inner product to solve applications in the physical sciences (e.g., work, force, navigation)

6.15 Use the inner product to determine if vectors are parallel or perpendicular

6.16 Use the inner product of vector to determine the distance from a point to a line or between two non-intersecting lines

6.17 Write equations of lines and segments in vector form

6.18 Transform an equation of a line from rectangular to vector form and vice versa

6.19 Find the slope of a vector

7.0 Knowledge of functions

*7.1 Know a definition for an exponential function

7.2 Evaluate and graph exponential functions

*7.3 Use the laws of exponents to solve problems

7.4 Solve exponential and logarithmic equations

*7.5 Use knowledge of logarithmic functions to solve problems

7.6 Know that a logarithmic function is the inverse of an exponential function

*7.7 Differentiate between a relation and a function

*7.8 Determine the domain, range, and zeroes of a function

7.9 Represent functions in different ways (e.g., graph, mapping, set of ordered pairs, formula)

7.10 Classify functions (e.g., linear, exponential, trigonometric)

7.11 Generate a function given a set of conditions

7.12 Use standard notation associated with functions

*7.13 Use terminology related to functions (e.g., domain, range, inverse)

7.14 Use logarithms to approximate answers to arithmetic problems

7.15 Change a logarithm from one base to another

7.16 Graph logarithmic functions

7.17 Use the definitions and laws of exponents in simplification and computation

7.18 Find maximum and minimum points of a function

7.19 Identify continuous functions

7.20 Identify discontinuous functions and locate points of discontinuity

7.21 Find the limit of a function if it exists

7.22 Find the tangent to a curve at a point by determining the derivative of the function at that point

7.23 Find the area under a curve by using integration

8.0 Knowledge of Analytic Geometry

*8.1 Draw the graph of a line and state some of the characteristics of the line

*8.2 Solve problems involving systems of lines

*8.3 Graph quadratic relations or functions

8.4 Write the definitions of the conic sections

*8.5 Use terminology related to conics (e.g., cone, intersection, major axis, eccentricity, vertices, asymptotes)

8.6 Write equations, in general form, for the conic sections

*8.7 Recognize the equation of a circle, parabola, ellipse, and hyperbola

8.8 Graph conic sections on either Cartesian or polar coordinate planes

8.9 Find the points of intersection, if any, of two or more geometric figures algebraically and graphically

8.10 Find the axis (axes) of symmetry and use it (them) as an aid to graphing conics

8.11 Find the asymptotes of a hyperbola

8.12 Find the center of a circle or an ellipse

8.13 Sketch the graph of second degree equations

8.14 Transform an equation by translation, rotation, and reflection

9.0 Knowledge of the basic concepts of mathematical logic, connectives, quantifiers, axiom systems, and proofs

*9.1 Know the terminology and symbolism of mathematical logic

*9.2 Demonstrate a thorough knowledge of the concepts of equivalence and implication

*9.3 Negate a logical statement which employs quantifiers

*9.4 Know that an open sentence is a statement which contains a variable and becomes a proportion when an element is substituted for the variable

*9.5 Form the converse, inverse, and contrapositive of a given implication

*9.6 Construct truth tables and use them to test the truth or falsity of compound statements

10.0 Knowledge of the basic concepts of set theory

*10.1 Use the set theoretic operations: union, intersection, complementation, and Cartesian product

*10.2 Describe basic set operations using Euler Circles, mappings, and Venn-Diagrams

*10.3 Know the relationship between the logical operations and set theoretic-operations

10.4 Demonstrate a thorough knowledge of the concept of a set theoretic relation

10.5 Know which structural properties are true for an operation or operations on given subsets of the real number

11.0 Knowledge of the capabilities and limitations of various types of computers

*11.1 Write a computer program in a language such as BASIC, PASCAL, FORTRAN, or COBOL

*11.2 Use a computer to find numerical approximations using "canned" or original programs

12.0 Understanding of the historical development of mathematics, the universality of mathematics and its applications in today's world

*12.1 Possess a knowledge of the contributions of the major figures in the history of mathematics, e.g., Euclid, Archimedes, Newton, and Euler

12.2 Possess a knowledge of the historical interplay between mathematics and the physical sciences

12.3 Possess a knowledge of the mathematical contributions of the Greeks and the Arabs

12.4 Possess a knowledge of the modern applications of mathematics to problems of the social sciences

Professional Knowledge and Instructional Skill-Content Specific

13.0 Understanding of the goals/objectives of mathematics education and the evaluation of student performance

*13.1 Describe goals of mathematics education and translate these goals into instructional outcomes

*13.2 Construct teacher-made tests to measure student learning as defined by the goals and objectives of the course; analyze and interpret results, and use findings to plan future instruction

*13.3 Select appropriate criterion referenced and norm referenced mathematics tests, interpret and analyze the results, and use results in formative and summative evaluation

14.0 Ability to demonstrate skill in planning units of work and daily lessons in mathematics

*14.1 Develop teaching strategies that facilitate student learning of mathematical facts, techniques/procedures, concepts, principles and problem solving skills

*14.2 Identify subtasks that are prerequisite to learning a given instructional task (e.g., finding the least common multiple (LCM) is prerequisite for adding two fractions with unlike denominators)

*14.3 Prepare unit and daily lesson plans appropriate for the objectives to be achieved

*14.4 Plan the use of instructional time to provide adequate review, development, feedback assimilation, practice, and maintenance

*14.5 Plan lessons that build in review and reteaching of arithmetic and pre-algebraic concepts and skills where a need is determined

*14.6 Design mathematics lessons using a variety of modes of instruction (e.g., expository, discovery, laboratory activities)

15.0 Knowledge of current trends in the mathematics curriculum and content development

*15.1 Possess a knowledge of the content of current curriculum guides in mathematics (e.g., SDPI Mathematics Curriculum Guides, the SDPI Teacher Handbook For The Competency-Based Curriculum and local courses of study with emphasis in grades 6-9)

*15.2 Aware of historical influences in mathematics education in the U. S. that provide perspective on current practices

*15.3 Possess a knowledge of the current developments and recommendations in mathematics education at the state and national levels

16.0 Awareness of instructional resources that facilitate the teaching and learning of mathematics

*16.1 Aware of the professional literature on teaching and learning of mathematics (i.e., journals, yearbooks, methods books, textbooks)

*16.2 Select instructional materials (concrete, pictorial, and symbolic), models, and equipment that are appropriate aids for mathematics instruction

*16.3 Develop and select materials appropriate for reviewing and reteaching arithmetic concepts and skills

*16.4 Aware of the services of state and national professional organizations concerned with the teaching and learning of mathematics

17.0 Ability to make use of implications from the behavioral sciences in the teaching and learning of mathematics

  *17.1 Apply general principles in psychology and professional education that facilitate the teaching and learning of mathematics (e.g., Learning is facilitated by immediate and positive reinforcement. Review spaced over intervals of time increases retention. Learning with understanding is more permanent and transferable than rote learning)

18.0 Demonstration of teaching skill in mathematics in simulated and real classroom settings

  *18.1 Demonstrate the ability to carry out a lesson plan and to explain mathematics with clarity and meaning using appropriate examples, illustrations, equipment, and materials

  *18.2 Use concrete, pictorial, and/or symbolic representations to facilitate the learning of mathematics

  *18.3 Demonstrate the ability to teach arithmetic, general mathematics, pre-algebraic, and algebraic concepts, and procedures with meaning

  *18.4 Demonstrate the ability to teach measurement and intuitive geometry with meaning

  *18.5 Demonstrate the ability to teach a unit relative to computer literacy

  *18.6 Demonstrate technical skill associated with effective mathematics instruction (i.e., lesson set/preview, questioning skills, wait time, and transition between activities in a lesson)

  *18.7 Demonstrate skill in teaching a lesson in mathematics in grades 6-9 using a variety of instructional modes (e.g., expository, discovery, laboratory activities)

19.0 Mathematics – Computer Competencies (Level II)

  19.1 All Mathematics teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Mathematics education by:

    19.1.1 Exhibiting a working knowledge of computer technology

    19.1.2 Being prepared to set up a computer terminal

    19.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

    19.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

19.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

19.2 Mathematics teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

19.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

19.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, data collecting

19.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Mathematics Program (CAI) relative to: Attitudes, Process, and Mathematical Concepts and Skills.

19.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

19.3 The Mathematics teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

19.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.

19.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Mathematics education experiences

19.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

19.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

SCIENCE
(Grades 6-9)

A. Nature of Science in the Curriculum

Science may be defined as a body of knowledge and a process by which more knowledge is learned or discovered. Attention must be devoted to both of these when science is being taught. The objective for studying science is to obtain scientific inquiry. This implies that instruction should be largely laboratory-centered with stress on the scientific method through applications of the scientific process skills. Problem-solving and reasoning skills are an essential part of this process. The inquiry methods should often deal with real world problems that are socially relevant. Personal needs, societal issues, and career preparation should be interwoven into the course content. Recent advances in science and technology should permeate instruction throughout.

Project Synthesis, prepared for the National Science Foundation as one of the most comprehensive studies of the status of science education in the U. S. at the pre-college level, identified four major goal clusters on which science education should be based. Below is a brief summary of each of the four goal clusters.

Goal Cluster I	Personal Needs. Science education should prepare individuals to utilize science for improving their own lives and for coping with an increasingly technological world.
Goal Cluster II	Societal Issues. Science education should produce informed citizens prepared to deal responsibly with science-related societal issues.
Goal Cluster III	Academic Preparation. Science education should allow students who are likely to pursue science, academically as well as professionally, to acquire the academic knowledge appropriate for their needs.
Goal Cluster IV	Career Education/Awareness. Science education should give all students an awareness of the nature and scope of a wide variety of science-and technology-related careers open to students' varying aptitudes and interests.

Any component of a teacher education program designed to provide science certification for students should reflect the above four goal clusters.

Certification Regulations

To be certified in science at the middle grades level, a teacher must hold a middle grades certification and have a concentration in science. The competencies that a teacher should possess as a result of this concentration in science are listed under General Competencies (Grades 6-12) and under the Specific Competencies (Grades 6-9) section which follows. A teacher could reasonably achieve these competencies through taking courses in biology, chemistry, physics, and earth science, totaling 16-18 hours college credit, with a minimum of three hours credit in each of the four science areas. A teacher holding middle grades certification is eligible to teach science in any or all grades 6-9.

B. Guidelines for Preparation of Middle Grades Science Teachers

There are no specific guidelines for Middle Grades Science.

C. Competencies Needed by Teachers to Achieve Program Objectives

General Competencies Required for all Science Teachers (Grades 6-12)

1.0 Demonstrate familiarity with, and skill in, the use of the North Carolina Standard Course of Study and the Teacher Handbook For The Competency Based Curriculum, in planning for science instruction.

2.0 Demonstrate a positive attitude toward teaching science

3.0 Demonstrate knowledge and understanding of basic science concepts and process skills, and of the social implications of science

  3.1 Demonstrate a general knowledge of the basic concepts of the life sciences and the physical sciences including earth science

  3.2 Demonstrate knowledge of basic environmental concepts

  3.3 Demonstrate ability to identify and integrate science process skills into all science activities

  3.4 Demonstrate proficiency in using the International System (SI) of Measurement

  3.5 Demonstrate knowledge and application of the scientific method in teaching science

  3.6 Demonstrate a knowledge of and an ability to provide instruction relative to science-related societal issues

4.0 Demonstrate an understanding of the interrelationships among various disciplines of science

5.0 Demonstrate an understanding of the interrelationships between science and other academic areas

6.0 Demonstrate an awareness of the economic and technological importance of the application of science

7.0 Demonstrate the ability to adapt science instruction to meet the varied needs, abilities, and interests of students

  7.1 Demonstrate an ability to adapt instruction to the intellectual developmental stages of students

7.2 Demonstrate the ability to plan and execute lessons that make use of resources outside the school environment, such as field trips, speakers, special events, and community resources

7.3 Demonstrate the ability to plan and conduct a laboratory lesson which includes the concept(s), appropriate activity(ies), science process skills, science materials and equipment, and evaluation procedures

8.0 Demonstrate the ability to develop appropriate evaluation procedures to assess student performance

9.0 Demonstrate an understanding of the investigative nature of science

10.0 Demonstrate knowledge of current safety standards and state laws relating to conducting science laboratory activities

11.0 Science – Computer Competencies (Level II)

11.1 All Science teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Science Education by:

11.1.1 Exhibiting a working knowledge of computer technology

11.1.2 Being prepared to set up a computer terminal

11.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

11.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

11.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

11.2 Science teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

11.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

11.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, science lab data, and statistical analysis.

11.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Science Program (CAI) relative to the four major goal clusters described in the Competency-Based Curriculum.

11.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

11.3 The Science teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

11.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.

11.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Science education experiences

11.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

11.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

Specific Competencies

To obtain middle grades science certification, the teacher should acquire the following competencies:

1. Know major concepts of life science related to interdependence, diversity, heredity, and the environment
2. Know the major components of life science such as zoology, botany, genetics, bacteriology
3. Be able to name and describe the major structures and functions of all the main systems of the human body: skeletal, muscular, integumentary, digestive, respiratory, nervous, excretory, reproductive, circulatory, and endocrine
4. Be able to discriminate between good and bad health practices
5. Know what factors such as heredity and nutrition affect growth and maturation of persons
6. Know of the contributions of major scientists in biology, chemistry, physics, and earth science.
7. Have knowledge of the likenesses and differences between plant and animal cells
8. State the role of DNA in heredity

9. Understand the process and importance of meiosis and mitosis

10. Understand genetic mutation

11. Understand ways organisms adapt to survive

12. Understand basic animal behavior such as courtship, aggressiveness, warning, and offspring identification

13. Know how some animals, such as the horse, have changed through the ages

14. Be familiar with the characteristics of plants and animals

15. Know the meaning of a population, a community, an ecosystem, and an organism

16. Understand the roles of producers, consumers, and decomposers in a community

17. Understand cycles within an ecosystem such as carbon, nitrogen, water, and nutrients

18. Understand the flow of energy in a food chain or web

19. Know the essential needs of a community such as water, heat, light, minerals, etc.

20. Understand how people and the environment have changed

21. Know methods of conserving natural resources

22. Understand the process of photosynthesis and its significance to life on earth

23. Understand asexual and sexual reproduction

24. Know the various branches of earth science and their interrelations

25. Be aware of the large number and variety of careers related to the four major branches of science: earth science, physics, chemistry, and biology

26. Understand the earth's motion in space relative to other subjects

27. Understand how the earth's rotation on its axis causes day and night

28. Understand what causes seasons

29. Understand basic effects of gravity

30. Understand the meaning of latitude and longitude

31. Understand how time is determined

32. Know the basic properties of minerals and their atomic structure

33. Be able to identify common rocks, explain their origin, and relate them to rock cycle

34. Understand the difference between physical and chemical weathering

35. Understand the theory of uniformitarianism

36. Know several ways that people and natural activities accelerate soil erosion

37. Understand the main principles of stream formation

38. Understand processes by which fossils are preserved in sediments or sedimentary rocks

39. Know the principal evidence for tectonics

40. Describe the atmosphere's structure including the troposphere, stratosphere, and ionosphere

41. Be able to illustrate the water cycle and explain its relationship to the atmosphere and other processes on earth

42. Understand the causes for general circulation in the atmosphere

43. Understand the basic principles of cloud formation and relate them to circulation and forms of precipitation

44. Know how to trace the life cycle of a typical cyclone across the United States

45. Understand the origin, life cycle, and behavior of thunderstorms, tornadoes, and hurricanes

46. Know how common atmospheric properties are measured and be able to use simple instruments such as the thermometer, hydrometer, anemometer, and rain gauge

47. Know the difference between weather and climate

48. Understand how climates are altered by geography

49. Understand how several scientific disciplines (geology, biology, etc.) are applied to the study of oceans

50. Be familiar with topics typically studied by oceanographers

51. Understand the effects of ocean currents on both land and water climate and ecosystems

52. Understand how coastal landscapes are changed by waves, tides, currents, winds, and tectonic action

53. Have a general understanding of the history of space travel

54. Know the physical laws under which rockets function

55. Know how satellites may be applied to the study of the earth, including weather and land resources

56. Know several advantages and disadvantages of space probes as opposed to manned exploration

57. Know the major planetary bodies and their positions in the solar system

58. Understand how stars are located on the celestial sphere

59. Know basic concepts related to space and astronomy

60. Know the properties of each state of matter and how they are interrelated

61. Understand the laws of conservation of matter

62. Understand the basic structure of the atom

63. Understand the general concepts of nuclear fission and fusion

64. Understand the useful applications of radioactive isotopes in areas such as industry, medicine, and agriculture

65. Understand the general arrangement of the periodic table

66. Be able to give examples of chemical reactions

67. Understand formula writing

68. Know basic characteristics of acids, bases, and salts

69. Know examples of common organic compounds and examples of their uses

70. Know the theory of how coal, petroleum, and natural gas were formed

71. Know four basic units of the metric system of measurement

72. Be able to distinguish between potential and kinetic energy

73. Know various kinds of energy and their interrelationships

74. Be able to calculate mechanical advantages

75. Possess a general understanding of Newton's three laws of motion

76. Know of the contributions that Galileo and Newton made to the understanding of gravity

77. Understand the basic principles of fluid pressure

78. Know how to determine the density of a common object

79. Understand attraction and repulsion as they relate to electricity and magnetism

80. Be able to demonstrate the pattern of magnetic lines of force

81. Understand the orientation of atoms in a magnet

82. Be able to solve electrical circuit problems

83. Understand practical uses of chemical reactions which occur in such devices as the dry cell, car battery, etc.

84. Be able to calculate the cost of electrical energy

85. Understand the characteristics of transverse and longitudinal waves

86. Understand how sound waves are produced and know their basic characteristics

87. Understand light of reflection and refraction

88. Understand the difference between heat and temperature

89. Be able to calculate simple heat problems

90. Understand heat conduction, convection, and radiation

91. Understand the effects of temperature on the pressure and volume of a gas

92. Know ways of conserving electrical and heat energy in the home, in business, and in schools

SOCIAL STUDIES

(Grades 6-9)

A. Purpose and Nature of Social Studies Instruction in the Curriculum

The primary goal of social studies instruction is to provide each student the experiences necessary for attainment of the knowledge, skills, and attitudes necessary for becoming an effective and contributing citizen.

To insure the realization of this primary goal, a balanced K-12 social studies program should enable each student to:

1. Develop concepts and make valid generalizations that provide insights into political, economic, and social behavior of people
2. Become proficient in geography skills and in the skills needed for problem solving, decision making, planning, and participation
3. Acquire knowledge about (a) the structure and functions of the social, political, and economic institutions in American society; (b) the development and unique characteristics of past and present societies; and (c) issues and problems which have persisted throughout history
4. Develop a system of values consistent with the fundamental tenets of democracy
5. Develop constructive attitudes toward diversity, change, conflict, and uncertainty
6. Develop an understanding of oneself and one's relationship to others and to environment

A balanced program of social studies education is basic to all learning in school. Social Studies is the single curriculum area whose subject matter is the entirety of human experience. It is in social studies classes that students put to use the skills introduced in other areas as they learn to understand and practice the art of living and working together in a productive and nondestructive manner. Social studies become the framework through which the basic skills are integrated, and through which other areas are naturally correlated.

The social studies program begins at the kindergarten level with the introduction of basic social studies concepts, and the consideration of individual and group relationships. In grades one, two and three, these basic concepts are expanded and new concepts introduced while studying the home, school, neighborhood and community.

Beginning at grade four and ending at grade seven, the program focuses on the study of specific areas of the world. The study at this level emphasizes geography, people, economics, government, and glimpses into the history of the region that is studied. North Carolina and the Southeastern Unites States are studied in grade four; the Americas in grade five; Europe and the U.S.S.R. in grades six; and Africa, Asia and the Pacific Islands in grade seven.

In grades eight and nine, there is a comprehensive study of the history of the United States and North Carolina. The study in grades ten through twelve includes world cultures and the United

States in today's world. The basic program is supplemented by individual courses in economics, geography, history, political science and sociology.

B. Guidelines for Preparation of Middle Grades Social Studies Teachers

The program of preparation for middle grade certification (grades 6-9) should include eighteen semester hours of concentration in specific areas (beyond the social studies general education requirement and excluding instruction in materials and methods) of the prospective teacher's undergraduate program.

GUIDELINE 1: The program should assure that the student acquires through general education an understanding of the social, political, geographical, economic, and historic forces operating in society.

Preparation to teach social studies requires appropriate study of anthropology, economics, geography, history, political science, and sociology. The study in each of these areas should give the prospective teacher an understanding of the scope and methodology of history and the social science disciplines. The student should be introduced to analytic skills, concepts, and generalizations of each discipline. The depth of comprehension should be developed well beyond the introductory level.

GUIDELINE 2: The program should provide for a concentration in history and social sciences reflected in the competencies (grades 6-9), and should broaden and intensify the social science requirement reflected in guideline number four of the general education section.

The prospective middle grades teachers should have a broad base in American history with a more specialized study of N. C. history and geography. The teacher should also have a knowledge of world geography (six semester hours in cultural and/or political), political science (local, state, and federal government), economics (American economy), and cultural anthropology.

Both the broad and concentrated study should focus on the basic facts, concepts, generalizations, and methods of the discipline(s) studied. The prospective teacher should study North Carolina, the U. S., and other cultures, and should be afforded opportunities to understand the major social, political, environmental and economic problems confronting the world. The program should be designed to show how differing environments, customs, and values condition individuals, groups, and societies.

Eighteen semester hours beyond the general education requirement in social sciences should be devoted to this general area of concentration.

GUIDELINE 3: The program should provide for the development of the skills required to formulate objectives, use resources, select content, use effective teaching strategies, evaluate learning outcomes, and interact with students, parents, and others.

The prospective teacher should be prepared to analyze student needs, formulate instructional objectives, and select materials for classroom use. The prospective teacher should also develop the ability to select, create and use a variety of teaching strategies. Opportunities to design, identify and use a variety of evaluation strategies should be provided to each prospective teacher. The student seeking social studies certification should possess the ability to use a variety of resources to seek new information. The ability to take the perspective of others, use democratic classroom methods and recognize and deal with controversial issues are necessary skills for the well-prepared social studies teacher. Preparation under this guideline should be a part of the professional program.

GUIDELINE 4: The program of preparation should develop an individual awareness of the need for continuing education and professional development.

Programs of pre-service education education should develop in students an awareness of the necessity for continuing study. A constant renewal of social studies knowledge and skills should be provided through self-education, in-service education, and formal graduate study.

C. Competencies Needed by Teachers to Achieve Program Objectives

Knowledge of history and social sciences is a necessary ingredient for understanding concepts, generalizations and processes in social studies. Knowledge by itself, however, is of little use. The most important role of the social studies teacher is to foster development of student understanding of concepts, generalizations, and processes through the use of knowledge. These understandings are essential to the skills of thinking, reasoning, problem solving, and decision making – ultimate goals of social studies instruction.

Social Studies

1.0 The major themes of North Carolina History

  1.1 Identify major periods of North Carolina history

  1.2 Illustrate a knowledge of the social, economic, political, cultural and geographical characteristics that influenced each period

  1.3 Understand the role of North Carolina in national and international affairs

2.0 The major themes of European culture

  2.1 Identify major cultures of European civilization

  2.2 Illustrate a knowledge of the social, economic, political, cultural, and geographical characteristics that influenced each culture

  2.3 Understand the European heritage of the United States

3.0 African and Asian civilizations

  3.1 Identify cultures within African and Asian civilizations

  3.2 Illustrate a knowledge of the social, economic, political, cultural, and geographical characteristics of these civilizations

  3.3 Understand the influence of these civilizations upon the world

4.0 Significant current events

- 4.1 Describe the relationship between current affairs and antecedent developments
- 4.2 Use knowledge of past and current events to forecast about the future
- 4.3 Understand the interrelatedness of current events

5.0 The importance of global interdependence

- 5.1 Relate world events to the lives of students
- 5.2 Emphasize the universal consequences of events

6.0 How societies attempt to meet their economic goals

- 6.1 Describe the different economic systems
- 6.2 Explain how economic systems reflect the values of societies
- 6.3 Understand economic interdependence
- 6.4 Understand the interaction of political and economic systems

7.0 The American economic system

- 7.1 Describe the theory of the free enterprise system, its history and foundation and the manner in which it is actually practiced
- 7.2 Understand how private ownership reflects the values of the society
- 7.3 Understand the role of the individual in determining production in a market system

8.0 The function of government

- 8.1 Understand the rule of law
- 8.2 Identify sources of authority within different forms of government
- 8.3 Explain how different forms of government view the role of the individual
- 8.4 Understand the international impact of national politics

9.0 The foundation, structure, and function of American government at local, state, national, and international levels

- 9.1 Understand the jurisdiction of the executive, legislative, and judicial branches
- 9.2 Describe the interlocking relationship among the different levels of government

- 9.3 Explain the American political process in practice
- 9.4 Understand the uniqueness of the American political system

10.0 Physical Geography

- 10.1 Develop a sense of the distribution of the major features of the earth
- 10.2 Explain the influence of the physical and cultural environments on the distribution of settlement and land use

11.0 Political and economic geography

- 11.1 Understand the political divisions of the world
- 11.2 Describe the location and implication of the major concentrations of natural resources
- 11.3 Explain the effects of political boundaries upon the access to natural resources and the use of airspace and waterways

12.0 The major themes of U. S. history and their interrelatedness

- 12.1 Understand the major events in U. S. History
- 12.2 Illustrate a knowledge of the social, economic, political, cultural, and geographical characteristics that influenced major events in U. S. History
- 12.3 Understand the role of the United States in world affairs

13.0 Social Studies – Computer Competencies (Level II)

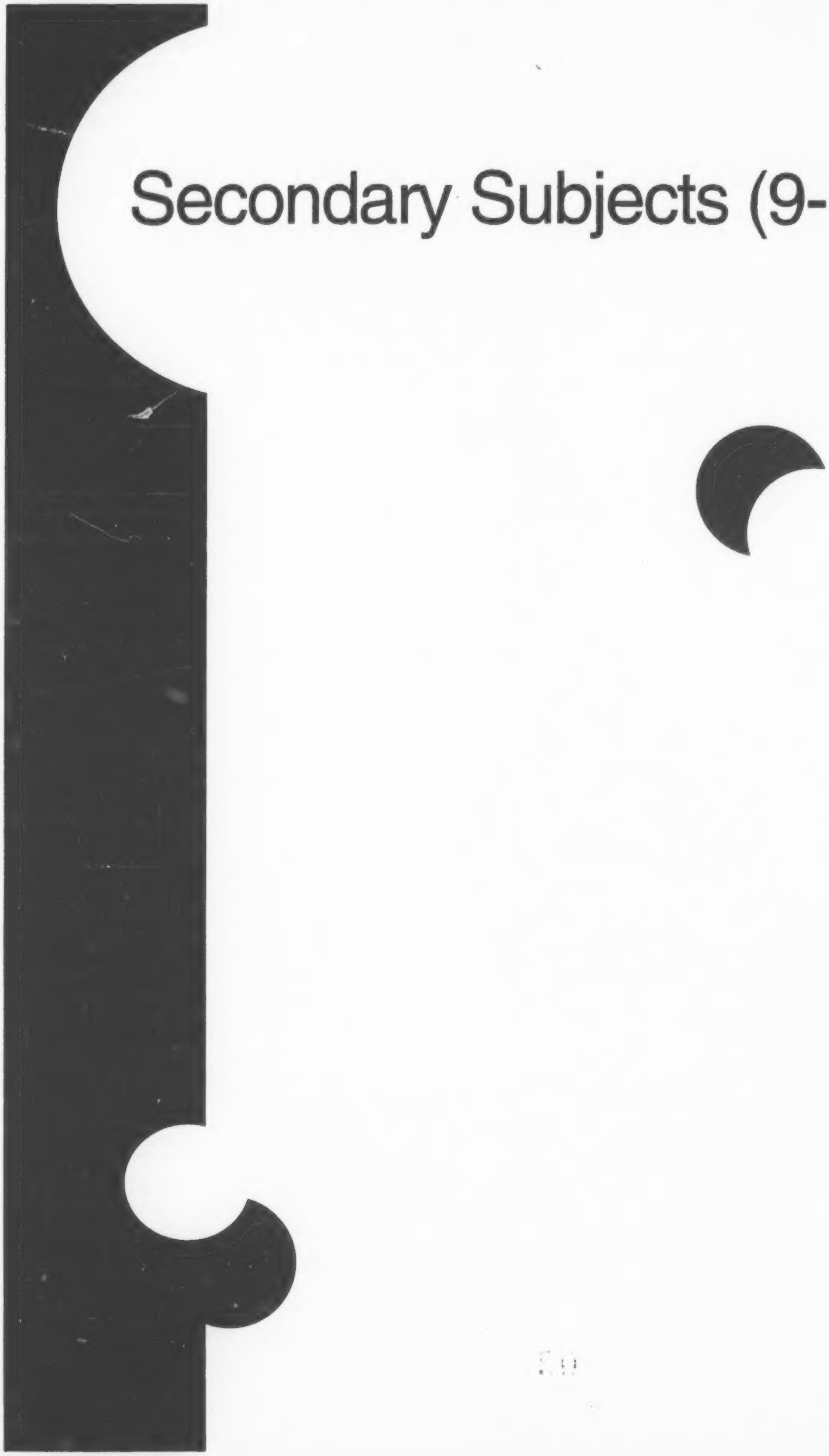
- 13.1 All Social Studies teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Social Studies Education by:
  - 13.1.1 Exhibiting a working knowledge of computer technology
  - 13.1.2 Being prepared to set up a computer terminal
  - 13.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval
  - 13.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs
  - 13.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

13.2 Social Studies teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

- 13.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, etc.
- 13.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, lab data and analysis.
- 13.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Social Studies Program (CAI) relative to the seven major areas described in the competency-Based Curriculum: History, Geography, Economics, Political Science, Anthropology, Psychology, and Sociology.
- 13.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

13.3 The Social Studies teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

- 13.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.
- 13.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Social Studies education experiences
- 13.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information
- 13.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology



Secondary Subjects (9-12)

ENGLISH

(Grades 9-12)

A. Purpose and Nature of English in the School Curriculum

The ability to communicate effectively is essential for survival in a rapidly changing world--a world of altered values and life styles created by increased knowledge and technology. Man's language is the means by which he establishes his relationship with his fellow man and his environment. It embodies responses to human experiences involving value judgement and the assumption that human life has meaning. Therefore, the aim of communication skills instruction in grades 6-9 and English instruction in grades 9-12 is to create literate citizens who can experience life through literature; who can internalize and extend experiences through oral, written, and visual composition; and who can share their encounters with life through the use of language as they interact with people.

Communication skills is a study of the processes of communication using verbal and non-verbal symbols. Traditionally, Language Arts has been concerned with the verbal aspects of language, literature, and composition. Communication skills instruction today, however, is broadening the conventional understandings of these three areas, anticipating increased emphasis on non-verbal communication. All five skill areas--reading, writing, listening, speaking, and viewing--are important for effective communication. At every level of instruction, kindergarten through grade twelve, communication skills is an integral part of the school curriculum.

B. Guidelines for Preparing Teachers of English

The program of preparation for the prospective teacher of English should consist of approximately 30 percent (excluding instruction in methods) of the undergraduate studies, planned in accordance with the following guidelines:

GUIDELINE 1: The program should provide study in language, literature, composition, and mass media as they relate to an understanding of the process of communication; and should develop the prospective teacher's ability to impart these things to students.

Specialized study in language would include the following: the basic skills of reading, writing, speaking, listening, and viewing needed to use and understand the English language; the library of the English language, including the sources and development of the English vocabulary; descriptive analysis, with a working acquaintance of at least two grammatical systems; the social, regional, and functional varieties of English dialects; and the role of non-verbal language in the English curriculum. Specialized study in literature would include the following: works from the British and American tradition in the various genres, by the major authors, and from the various historical periods; significant works of foreign literature in translation; critical approaches to literature with emphasis upon close reading of texts; writing that is especially appropriate for children and adolescents; works written by and about women and other minorities; and works presented through non-print media. Specialized study in composition would include the following: the principles and theories of rhetoric, classical and modern; an understanding of the process of composition in both verbal and non-verbal terms; and the ability to analyze critically all forms of composition.

GUIDELINE 2: The program should provide study in the skills of reading, writing, speaking, viewing, and listening; and develop the prospective teacher's ability to impart these skills to students.

Opportunities should be provided to develop skills in the reading process and the factors affecting reading. Instruction should include several approaches to the teaching of reading and ways to use appropriate methods to improve the reading abilities of students at various levels of achievement and with various rates of progress. Experiences should be designed to permit the prospective teacher to demonstrate competency in the expository aspects of both oral and written communication and in relating these to creative writing and to other forms of expression such as painting, music, pantomime, puppetry, creative dramatics, and film-making. Instruction should include the skills involved in nonverbal language communication and should encourage the acquisition of listening skills and the ability to develop these skills in others.

GUIDELINE 3: The program should provide an opportunity to demonstrate proficiency in using a variety of methods in the teaching of English.

Opportunities should be provided to permit the individual to consider and analyze thoroughly the purpose of English instruction in the schools. Study should include the preparation and analysis of units of instruction, individual lessons, instructional material, and instruments of measurement; and how to understand and appraise the development and effectiveness of courses of study. Instruction should permit the student to create or find, evaluate, and use significant instructional materials from various media: texts, films, kinescopes, audio tapes, video tapes, records, slides and programmed materials. Instruction should include the nature and impact of such factors as social, economic, and cultural deprivation, multi-cultural considerations, and the needs of exceptional children on the teaching learning process. Special emphasis should be given to these factors in relation to the teaching of English. The prospective teacher should be led to understand the techniques, possibilities, and limitations of diagnosis, testing, and grouping students by interest, aptitude, achievement, and task.

The program should be designed to help the prospective teacher understand how to integrate the many aspects of the language arts with one another and with other subjects in the curriculum.

GUIDELINE 4: The program of preparation should develop an individual awareness of the need for continuing education and professional development.

Study and experiences under this guideline should assure prospective candidates an opportunity to internalize and demonstrate a commitment to continued learning in the communication skills content areas(s), as well as the skill of teaching. Experiences with professional organizations, research, staff development, professional writing, and professional conferences are appropriate.

C. Competencies Needed by Teachers to Achieve Program Objectives

Content and Overall Knowledge: In order to carry out the objectives of the secondary curriculum, the teacher of English should possess a knowledge of the following:

1.0 Language (how language functions in reading, writing, listening, speaking, and viewing): The teacher will demonstrate an adeptness in the process of both producing and understanding oral and written communication and non-verbal language by being able to:

- 1.1 Demonstrate a working knowledge of standard grammar and usage

- 1.2 Demonstrate an understanding of how communication varies according to purpose, audience, and occasion

- 1.3 Demonstrate an understanding of literal, interpretive, and critical comprehension

- 1.4 Demonstrate a knowledge of the history of the English language the acquisition of language, and the psychological and sociological contexts of language usage

- 1.5 Demonstrate a working knowledge of the most esteemed notions about writing instruction and evaluation

2.0 Literature (reading materials): The teacher will demonstrate familiarity with a wide variety of literature such as:

- 2.1 Works of major British/American authors

- 2.2 Mythology and translations of major works by foreign authors

- 2.3 Writing which is especially appropriate for children and adolescents

- 2.4 Works written by or about women and minority groups

3.0 Instructional Techniques (how to enable students to employ efficiently the communication skills of reading, writing, listening, speaking, and viewing): The teacher will demonstrate:

- 3.1 The awareness of successful techniques for acquiring and developing the communication skills in students

- 3.2 The ability to develop innovative learning plans based on proven techniques

Professional Skills/Techniques/Methodologies: In order to carry out the objectives of an integrated curriculum, the teacher will demonstrate the ability to diagnose the needs of students and design and execute appropriate teaching activities which enable those students to develop effective thinking and communication skills in the following areas:

4.0 Reading (extracting meaning from the printed page): The teacher will:

- 4.1 Facilitate following written directions

- 4.2 Promote the various aspects of vocabulary development

- 4.3 Aid recognition of organizational patterns within written material

- 4.4 Enhance understanding through various levels of comprehension

4.5 Promote the appreciation of literature and an understanding of the various levels of comprehension

4.6 Stress cultural literacy as well as functional literacy

5.0 Writing (communicating through the written word): The teacher will:

5.1 Set a good example through effective writing practices

5.2 Promote the various aspects of pre-writing, including identifying a purpose, determining the audience, selecting an appropriate form, and organizing

5.3 Utilize pre-writing plans, appropriate grammar, and suitable usage to produce a draft

5.4 Apply the principles of editing to a draft to prepare it for revision

5.5 Aid student self-evaluation to determine strengths and weaknesses

5.6 Develop techniques for engaging the entire class in cooperative writing experiences

5.7 Promote the various aspects of writing based on research

5.8 Facilitate the ability to write speeches for oral presentation

6.0 Speaking (communicating orally): The teacher will:

6.1 Set a good example through effective speech practices and body language

6.2 Diagnose and reduce problems in speech practices and body language in students

6.3 Enable students to apply the major components of oral composition

6.4 Enable students to vary oral communication according to purpose, audience, and occasion

6.5 Demonstrate effective use of group discussion skills

6.6 Promote an awareness and acceptance of varying speech patterns

7.0 Listening (extracting meaning from the spoken word): The teacher will:

7.1 Facilitate the distinguishing of sounds

7.2 Develop the students' ability to listen for a purpose (literal, interpretive, critical, creative)

7.3 Develop the students' ability to listen with understanding, appreciation, and enjoyment

8.0 Viewing (extracting meaning from non-print media): The teacher will:

8.1 Provide an understanding of visual communication through interpretation of images and visual symbols

8.2 Demonstrate familiarity with a wide variety of film types such as features, documentaries, and animated non-printed media

8.3 Provide opportunities for the development of taste and selectivity in viewing

8.4 Provide an understanding of propaganda techniques and the importance of mass media

8.5 Provide an understanding of critical thinking through the visual process

Professional Values

9.0 In order to promote communication skills in the classroom, school, and community, the teacher will:

9.1 Participate appropriately in the development of the curriculum in both decision-making and advisory capacities

9.2 Recognize the relationship between students' learning of language, both oral and written, and the social, cultural, and economic conditions within which they are reared

9.3 Serve as a model for correct and effective use of communication

10.0 In order to maintain high personal professional standards, the teacher will:

10.1 Stay informed of current trends in communications skills through in-service training and professional publications

10.2 Maintain affiliations with professional organizations

The following competencies are considered desirable for enriching the knowledge and skills of teachers and, as such, exceed minimum competency expectations

11.0 Content and overall knowledge: The teacher will demonstrate a working knowledge of:

11.1 Foreign language(s)

11.2 Other subject areas such as philosophy, psychology, history, geography, art history, music history, film history, and production

12.0 Professional Skills/Techniques/Methodologies: In order to plan for more effective instruction, it is desirable that the teacher be able to:

12.1 Apply journalistic principles and practices

12.2 Demonstrate dramatic techniques

12.3 Implement forensic methods

Communications and English-Computer Competencies (Level II)

13.0 All English teachers should demonstrate an understanding of basic concepts of computer hardware in relation to English education by:

13.1 Exhibiting a working knowledge of computer technology

13.2 Being prepared to set up a computer terminal

13.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

13.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

13.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

14.0 English teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

14.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

14.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, data collecting

14.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the English Program (CAI) relative to the areas of Listening, Speaking, Reading, Writing, Viewing

14.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

15.0 The English teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

15.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, etc.

15.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance English experiences

15.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

15.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

MATHEMATICS
(Grades 9-12)

A. Purpose and Nature of Mathematics Instruction in the Curriculum

Mathematics, like other subjects in the school curriculum, should satisfy a portion of the need of each individual to possess some control over his destiny. Specifically, the goal of mathematics education is to aid each individual in adjusting more satisfactorily to his physical, mental, and social environment by helping him/her to:

> Develop a mathematical literacy which will assist him/her in making wise decisions as a producer and/or consumer of products and services
>
> Use the words, symbols, and techniques of mathematics with precision so that he/she will be able to solve problems and to communicate ideas correctly and clearly
>
> Experience the satisfaction of mathematical discovery from which will evolve curiosity, initiative, confidence, and interest in mathematics
>
> Comprehend how mathematics contributes to the analysis of events that occur in the physical world
>
> Understand the contribution of mathematics to man's social, economic, philosophic, and artistic heritage
>
> Develop patterns of reasoning which will enable him/her, when confronting new situations, to invent mental representations, to formulate abstractions, to put forward hypotheses, to gather evidence, to verify conjectures, to draw inference, and to construct arguments

The school mathematics program is currently structured to achieve the above goals. Mathematics is presented in a sequential manner beginning at the elementary education level and continuing through the secondary school. In the early years (K-6), the student is exposed to the concept of quantity from which numerical operations involving whole, fractional, and decimal numbers are developed. In addition, he/she is taught many of the elementary ideas of geometry, measurement, and problem solving.

In grades 6-9, the ideas developed earlier are extended to include operations with the set of real numbers. At this level many students exhibiting a special competency in mathematics are enrolled in a curriculum which provides greater challenge and which enables them to work at a more abstract level in high school. The curriculum is structured to provide every student with learning experiences that not only challenge him/her, but also enable him/her to achieve a reasonable degree of success.

The high school mathematics curriculum (grades 9-12) provides for a variety of interests and needs. For students having a high aptitude in mathematics, courses in Algebra I, Geometry, Algebra II, and Advanced Mathematics are offered. In some schools this program is enriched by such courses as Calculus, computer-related mathematics, and consumer mathematics. The program is often strengthened through the inclusion of other courses in which the emphasis is on the applications of mathematics.

B. Guidelines for the Preparation of Mathematics Teachers

The program should consist of approximately 25 percent (excluding instruction in methods) of a four-year program, planned in accordance with the following guidelines.

GUIDELINE 1: The program should take into consideration the logical and sequential nature of mathematics, its structure and interrelationships, the universality of its contributions to culture.

The program for the preparation of mathematics teachers should give emphasis throughout the total program to the logical nature of mathematics and the universality of its applications; to the basic concepts of mathematics, initially formulated in possibly an abstract manner and given substance by concrete application to the solution of real-life problems; to the unity of mathematics which is separated into discrete disciplines for study purpose only; and to an understanding of the role of mathematics in the development of society.

GUIDELINE 2: The program of mathematics should include an in-depth study in those areas of mathematics having maximum relevance to the secondary curriculum.

It is essential that the prospective teacher of secondary school mathematics be aware of and skilled in dealing with basic concepts and currently valid view-points of algebra, geometry, probability/statistics, and analysis.

The study of algebra should include an introduction to algebraic structures and linear algebra; make the prospective teacher aware of the structure of algebra and how the manipulative techniques of algebra are derived from this structure; and include careful consideration of the structure of the number system and algebraic systems such as groups, rings, and fields. The work in linear algebra should include topics such as matrices, vector spaces, linear systems, and linear transformations.

The geometry in the program should include a critical study of the development of Euclidean and non-Euclidean geometry. Additional topics might include foundations of geometry, other types of geometries, and the study of a single geometry from various postulational systems

The work in probability/statistics should include not only an intuitive discussion of the integral and an introduction to the concept of a limit and its use in an intuitive approach to differential calculus, but also should include a deeper study of these topics and their application to other disciplines.

GUIDELINE 3: The program should include upper-level work in mathematics with relevance to current mathematical trends.

The upper-level work may be in one or more of those areas listed under Guideline 2 and/or other work chosen from offerings in mathematics such as set theory, logic, number theory, and topology.

GUIDELINE 4: The program should include experience with the field of computing as it relates to mathematics and the teaching of mathematics

The program should provide experiences in which the computer is used to carry out such algorithms as the determination of solutions for a quadratic equation or the evaluation of lower and upper approximations for the area under a curve.

GUIDELINE 5: The program should include work in areas related to mathematics.

The study should include work in related areas, such as science and the social sciences, in which problems are solved by means of mathematical ideas and methods in pursuit of a solution and the interpretation of results in light of the initial problem.

GUIDELINE 6: The program should include instruction in the use of methods, materials, and equipment specifically related to the teaching of mathematics.

The preparation should include a study of the present-day objectives of mathematics education and develop an understanding of methods and techniques suitable for attaining those objectives. It should develop knowledge of and skill in the use of educational media appropriate for teaching-learning in mathematics.

GUIDELINE 7: The program should develop an awareness of the need and the disposition for continued learning in the field of mathematics and the teaching of mathematics.

The program should develop within students the attitude that learning mathematics is exciting and rewarding, and that studying to keep abreast of a new development in mathematics, its application, and its pedagogy, must be a lifetime professional commitment for the teacher. Avenue open for further professional development include in-service education, independent study, and formal graduate study.

C. Competencies Needed by Teachers to Achieve Program Objectives

NOTE: Competencies identified by an asterisk are required for an endorsement to a certificate

1.0 Ability to recognize a problem that can be analyzed mathematically, to formulate mathematical models for the problem, to integrate mathematical ideas in search of solution, and to interpret the results in light of the initial problem

  *1.1 Use mathematics to solve "real world" problems that arise in disciplines such as physics, economics, chemistry, or computer science

2.0 Understanding of the basic limit processes as they occur in the calculus of functions of one variable and their applications to differentiation, integration, infinite series, and improper integration

  *2.1 Evaluate limits involving the elementary functions (i.e., the polynomial, rational, trigonometric, and exponential functions)

  *2.2 Demonstrate an awareness that derivatives and definite integrals are defined as limits

*2.3 Know the relationship between differentiability and continuity

*2.4 Possess a knowledge of the notations and fundamental concepts used in studying sequences and series

*2.5 Possess a knowledge of the basic properties of power series, especially the properties of geometric series

2.6 Possess a knowledge of the relationship between infinite series and improper integrals

2.7 Use the standard tests for convergence of infinite series, e.g., the comparison and ratio tests

2.8 Possess a knowledge of the Taylor series representations of the elementary functions

3.0 Ability to differentiate and integrate elementary functions and the ability to apply these processes in solving problems

*3.1 Use the rules for differentiating the elementary functions

*3.2 Evaluate integrals using algebraic and trigonometric substitutions, integration by parts, and partial fractions

*3.3 Find tangents to curves

*3.4 Solve maximum-minimum and related rates problems

3.5 Solve motion problems involving velocity and acceleration in one or two dimensions

*3.6 Find areas of regions bounded by curves

3.7 Sketch the graph of equations involving the elementary functions, the absolute value function, step function, etc.

3.8 Know the conic sections including their geometric properties and their relationship to the general second degree equation in two variables

4.0 Facility with the fundamental concepts and techniques of linear algebra: vector spaces, linear transformations and matrix operations

4.1 Use the concepts of length, dot product, and linear independence in at least 3 - dimensional Euclidean spaces

4.2 Solve geometric problems using vector space methods

4.3 Solve problems involving projections, rotation, and translations

*4.4 Represent linear transformations with matrices

*4.5 Add and multiply matrices; find inverses, transposes, and evaluate determinants

*4.6 Use matrices to solve dependent and independent systems of at least three linear equations with an understanding of the geometric significance of the system and its solution

4.7 Apply Cramer's Rule

5.0 Knowledge of elementary number theory and the fundamental structure of modern algebra-groups, rings, and fields

*5.1 Understand elementary number theory including modular arithmetic, Fundamental Theorem of Arithmetic, and the basic theorems pertaining to primes, composites, multiples, and divisors

*5.2 Apply the binomial theorem

5.3 Demonstrate a thorough mastery of the algebraic properties of the integers, the rational numbers, the real numbers, and the complex numbers including the polar representation of the complex numbers

5.4 Demonstrate a knowledge of the basic concepts of group theory including subgroups, quotient groups, cyclic groups, and the order of groups and their elements

*5.5 Determine whether a mathematical system possesses group properties and whether two groups are isomorphic

*5.6 Generate finite groups through the use of mathematical models, modular arithmetic, rigid motions of geometric figures, and permutations

5.7 Possess a knowledge of the basic concepts of ring theory, polynomial rings, and the field of complex numbers

*5.8 Demonstrate an understanding of real polynomials as related to the rational, real, and complex numbers

*5.9 Apply the Fundamental Theorem of Algebra

6.0 Thorough Knowledge of Plane Trigonometry

*6.1 Solve triangles; use the Laws of Sines, Cosines, and Tangents; solve trigonometric equations; and verify trigonometric identities

*6.2 Demonstrate a thorough knowledge of the trigonometric functions and their properties

7.0 Knowledge of Geometry - Euclidean and non-Euclidean

*7.1 Demonstrate a thorough knowledge of the synthetic approach to Euclidean plane geometry including work with congruence, similarity, area, and geometric constructions with an emphasis on both theory and application

*7.2 Use the fundamentals of Euclidean and solid geometry including work with volumes, surface areas, and solid angles

*7.3 Understand the historical and mathematical significance of the Parallel Postulate including an introduction to a non-Euclidean geometry

*7.4 Apply analytic methods to geometric problems

*7.5 Possess introductory knowledge of transformational geometry

8.0 Knowledge of the basic concepts of mathematical logic including connectives, quantifiers, axiom systems, and proofs

*8.1 Know the symbolism of mathematical logic

*8.2 Demonstrate a thorough knowledge of the concepts of equivalence and implication

*8.3 Negate a logical statement which employs quantifiers

*8.4 Possess a knowledge of the properties of consistency and independence of axiom systems

*8.5 Possess a thorough knowledge of the role of proof in the study and development of mathematics

*8.6 Create original proofs in the various branches of mathematics including direct proofs, indirect proofs, and proofs using mathematical introduction

9.0 Knowledge of the Basic Concepts of Set Theory

*9.1 Use the set theoretic operations: union, intersection, and complementation

*9.2 Know the relationship between the logical operations and the set theoretic operations

9.3 Demonstrate a thorough knowledge of the concept of a set theoretic relation

*9.4 Demonstrate a thorough knowledge of the concept of function including knowledge of the concepts: range, domain, one-to-one, into, onto, and inverse function

10.0 Knowledge of probability as a mathematical system, of random variables and their distributions, and of basic topics in statistical inference

*10.1 Understand the axiomatic approach to probability

*10.2 Compute probabilities in finite systems

10.3 Apply the binomial, normal, and student distributions

10.4 Estimate means and test statistical hypotheses involving problems arising in the social and natural sciences

11.0 Knowledge of the capabilities and limitations of various types of computers

*11.1 Write computer programs in a language such as BASIC, PASCAL, FORTRAN, or PL/I

*11.2 Use a computer to find numerical approximations for integrals, derivatives and solutions to polynomial equations using "canned" or original programs

12.0 Understanding of the historical development of mathematics, the universality of mathematics and its applications in today's world

*12.1 Possess a knowledge of the contributions of the major figures in the history of mathematics, e.g., Euclid, Archimedes, Newton, and Euler

*12.2 Possess a knowledge of the historical interplay between mathematics and the physical sciences

12.3 Possess a knowledge of the mathematical contributions of the Greeks and the Arabs

*12.4 Possess a knowledge of the modern applications of mathematics to problems of the social sciences

13.0 Understanding of the goals/objectives of mathematics education and the evaluation of student performance

*13.1 Describe goals of mathematics education and translate these goals into instructional outcomes

*13.2 Construct teacher-made tests to measure student learning as defined by the goals and objectives of the course, analyze and interpret results, and use findings to plan future instruction

*13.3 Select appropriate criterion-referenced and norm-referenced mathematics tests, interpret and analyze the results, and use the results in formative and summative evaluation

14.0 Ability to demonstrate skill in planning units of work and daily lessons in mathematics

*14.1 Develop teaching strategies that facilitate student learning of mathematical facts, techniques/procedures, concepts, principles, and problem-solving skills

*14.2 Identify subtasks that are prerequisite to learning a given instructional task. (e.g., Finding the Least Common Multiple (LCM) is prerequisite for adding two fractions with unlike denominators)

*14.3 Prepare unit and daily lesson plans appropriate for the objectives to be achieved

*14.4 Plan the use of instructional time to provide adequate review, development, feedback, assimilation, practice, and maintenance

*14.5 Plan lessons that build in review and reteaching of arithmetic, algebraic, and geometric concepts and skills where a need is determined

*14.6 Design mathematics lessons using a variety of modes of instruction (e.g., expository, discovery, laboratory activities)

15.0 Knowledge of current trends in mathematics curriculum and content development

*15.1 Possess a knowledge of the content of current curriculum guides in mathematics (e.g., SDPI Mathematics Curriculum Guide, the SDPI Teacher Handbook For The Competency-Based Curriculum and local course of study for grades 9-12)

*15.2 Aware of historical influences in mathematics education in the U. S. that provide perspective on current practices

*15.3 Possess a knowledge of the current developments and recommendations in mathematics education at the state and national levels

16.0 Awareness of instructional resources that facilitate the teaching and learning of mathematics

*16.1 Aware of the professional literature on teaching and learning of mathematics (i.e., journals, yearbooks, methods books, textbooks)

*16.2 Select instructional materials (concrete, pictorial, and symbolic), models, and equipment that are appropriate aids for mathematics instruction

*16.3 Develop and select materials appropriate for reviewing and reteaching of arithmetic concepts and skills

*16.4 Aware of the services of state and national professional organizations concerned with the teaching and learning of mathematics

17.0 Ability to make use of implications from the behavioral sciences in the teaching and learning of mathematics

*17.1 Apply general principles in psychology and professional education that facilitate the teaching and learning of mathematics. (e.g., Learning is facilitated by immediate and positive reinforcement. Review spaced over intervals of time increases retention. Learning with understanding is more permanent and transferable than rote learning)

18.0 Demonstration of teaching skill in mathematics in simulated and real classroom settings

*18.1 Demonstrate the ability to carry out a lesson plan and to explain mathematics with clarity and meaning using appropriate examples, illustrations, equipment, and materials

*18.2 Use concrete, pictorial and/or symbolic representations to facilitate the learning of mathematics

*18.3 Demonstrate the ability to teach arithmetic, pre algebraic, algebraic, geometric, trigonometric, and advanced mathematical topics with meaning

*18.4 Demonstrate the ability to teach a unit relative to computer literacy and computer programming with the BASIC language

*18.5 Demonstrate the ability to teach concepts from consumer mathematics with meaning

*18.6 Demonstrate the ability to provide remedial instruction

*18.7 Demonstrate technical teaching skill associated with effective mathematics instruction (ie., lesson set/preview, questioning skills, wait time, and transition between activities in a lesson)

*18.8 Demonstrate skill in teaching a lesson in mathematics in grades 9-12 using a variety of instructional modes (e.g., expository, discovery, laboratory activities)

19.0 Mathematics – Computer Competencies (Level II)

19.1 All Mathematics teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Mathematics education by:

19.1.1 Exhibiting a working knowledge of computer technology

19.1.2 Being prepared to set up a computer terminal

19.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

19.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

19.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

19.2 Mathematics teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

19.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

19.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, data collecting

19.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Mathematics Program (CAI) relative to: Attitudes, Process, and Mathematical Concepts and Skills.

19.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

19.3 The Mathematics teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

19.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.

19.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Mathematics education experiences

19.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

19.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

SCIENCE

(Grades 9-12)

A. Nature of Science in the Curriculum

Science may be defined as a body of knowledge and a process by which more knowledge is learned or discovered. Attention must be devoted to both of these when science is being taught. The objective for studying science is to obtain scientific inquiry. This implies that instruction should be largely laboratory-centered with stress on the scientific method through applications of the scientific process skills. Problem-solving and reasoning skills are an essential part of this process. The inquiry methods should often deal with real world problems that are socially relevant. Personal needs, societal issues, and career preparation should be interwoven into the course content. Recent advances in science and technology should permeate instruction throughout.

Project Synthesis, prepared for the National Science Foundation as one of the most comprehensive studies of the status of science education in the U. S. at the pre-college level, identified four major goal clusters on which science education should be based. Below is a brief summary of each of the four goal clusters.

Goal Cluster I	Personal Needs. Science education should prepare individuals to utilize science for improving their own lives and for coping with an increasingly technological world.
Goal Cluster II	Societal Issues. Science education should produce informed citizens prepared to deal responsibly with science-related societal issues.
Goal Cluster III	Academic Preparation. Science education should allow students who are likely to pursue science, academically as well as professionally, to acquire the academic knowledge appropriate for their needs.
Goal Cluster IV	Career Education/Awareness. Science education should give all students an awareness of the nature and scope of a wide variety of science-and technology-related careers open to students' varying aptitudes and interests.

Any component of a teacher education program designed to provide science certification for students should reflect the above four goal clusters.

Certification and Endorsement Regulations

The following regulations delineate the requirements for acquiring science certification and endorsement:

Secondary Science Certification

To be certified in a science area at the secondary level, a teacher must have a concentration in one, and additional work in another, of the four major areas of science: biology, chemistry, physics, earth science. The competencies that a teacher holding a science certification should possess are listed under General Competencies (Grades 6-12) and under a specific science area in the Specific Competencies (Grades 9-12) section which follows. A teacher could reasonably achieve these competencies through taking a minimum of 24 hours in one science area and at least 12 hours in another science area.

A teacher certified in one of the four major areas of science (biology, chemistry, physics, earth science) is eligible to teach full-time in that area in grades 9-12. If that teacher has 12 hours in another of the four major areas, he or she may teach less than half-time in that area in grades 9-12.

Secondary Science Endorsement

To be endorsed only in a science area at the secondary level, a teacher must have a concentration in one of the four major areas of science: biology, chemistry, physics, earth science. The competencies that a teacher should possess for endorsement in a science area are the same as those required for certification; however, the degree of competency may be less comprehensive. A teacher could reasonably achieve these competencies through taking at least 18 hours of course work in the endorsed science area. A teacher with an endorsement in a science area is eligible to teach less than half-time in that area in grades 9-12.

1. No certification in physical science is available. Physical science may be taught by a teacher certified in middle grades science, in chemistry, in physics, or endorsed in chemistry or physics. (See footnote #3.)
2. These 12 hours may be obtained through taking courses from more than one science area. However, it may be to the student's advantage to get the 12 hours in one science area. Twelve hours in one science area, when matched with 24 hours in another science area, may be counted as an endorsement in that area.
3. Note: There is an exception to this endorsement regulation. A teacher with an endorsement in chemistry or physics or with a combined number of hours in chemistry and physics which equals the required number of hours for an endorsement, may teach physical science full-time.

An additional endorsement in a specific science area may be added to a science certification through achieving the competencies listed under a specific science area in the Specific Competencies (Grades 9-12) section which follows. A teacher could reasonably achieve these competencies through taking at least 12 hours of course work in a specific science area.

Secondary Science Comprehensive Certification

To receive comprehensive certification in science at the secondary level, the teacher must have a concentration in one of the four major areas of science (biology, chemistry, physics, earth science), and additional work in the other three areas of science. The teacher must also possess the general competencies for all science teachers plus all the specific competencies listed for the four science areas of biology, chemistry, physics, and earth science. A teacher could reasonably achieve these competencies through taking at least 24 hours of course work in one science area plus a minimum of eight hours in each of the other three science areas.

A teacher with secondary science comprehensive certification is eligible to teach any or all of the areas of biology, chemistry, physics, or earth science in grades 9-12.

B. Guidelines for the Preparation of Science Teachers

The program of science teacher preparation should be in accordance with the following guidelines:

GUIDELINE 1: The program should provide study in the fundamental processes, skills, concepts, and attitudes within, and the interrelationship among, the various science areas.

Fundamental to the preparation of science teachers of grades 9-12 is a broadly based experience stressing the interrelatedness of major concepts within the various disciplines. Students should have course work in the biological, physical, and earth science disciplines. Emphasis should be focused on the commonalities in content, investigative approaches, attitudes, skills, processes, and concepts.

GUIDELINE 2: The program should provide for the teachers a mathematical competency sufficient to enable them to use mathematics appropriately in the sciences.

The program should provide for the development of those mathematical skills needed in the area of specialization. It is essential that all science teachers have minimum competency in algebra, geometry, trigonometry, and computer science. It is desirable that the prospective teacher of science be knowledgeable in calculus and statistics.

GUIDELINE 3: The program should provide an in-depth study in one or more areas of science: biology chemistry, physics, earth science, and this study have maximum relevance to the grades 9-12 science curriculum.

The areas of study include the following:

Biology

In a program of concentration in biology, the following topics should be emphasized: physiology, both cellular and general; morphology; behavior; genetics; growth and development; evolution; systematics; and ecology. The work should deal with living materials through laboratory and/or field experiences and should approach science as a technique of investigation and inquiry. Organic chemistry should be in the study and it is recommended that biochemistry be included.

Chemistry

A program of concentration in chemistry should emphasize the essential concepts in the following areas: inorganic chemistry, organic chemistry, analytical chemistry, and physical chemistry. It is expected that courses in mathematics, including calculus, which will provide a broader basis for the interpretation of scientific phenomena, will be included in the program of studies for preparation in depth in chemistry.

Physics

A program of concentration in physics should emphasize essential concepts in the following areas: physical mechanics, heat and thermodynamics, optics, electricity and magnetism, electronics, sound, atomic and nuclear physics

Earth Science

A program of concentration in earth science should include study in the basic areas--geology, meteorology, astronomy, and oceanography–and advanced work in one of these four areas.

GUIDELINE 4: The program should provide experience in the methods of instruction and in the use of materials suitable for teaching science.

The program should provide early experiences for prospective teachers in the development of learning environments as they relate to science education and in the use of strategies, media, and materials in direct and simulated experiences with students. Development of the ability to evaluate science learning in terms of stated goals should be strongly emphasized.

GUIDELINE 5: The program should develop the capacity and the disposition for continued learning in the field of science.

The program should reflect the rapid pace of change in the world of science requiring that science teachers upgrade their professional capability on a continuing basis, using such medium as in-service education, individual study, and formal graduate study.

C. Competencies Needed by Teachers to Achieve Program Objectives

General Competencies Required for all Science Teachers (Grades 6-12)

1.0 Demonstrate familiarity with, and skill in, the use of the North Carolina Standard Course of Study and the Teacher Handbook For The Competency Based Curriculum, in planning for science instruction.

2.0 Demonstrate a positive attitude toward teaching science

3.0 Demonstrate knowledge and understanding of basic science concepts and process skills, and of the social implications of science

  3.1 Demonstrate a general knowledge of the basic concepts of the life sciences and the physical sciences including earth science

  3.2 Demonstrate knowledge of basic environmental concepts

  3.3 Demonstrate ability to identify and integrate science process skills into all science activities

  3.4 Demonstrate proficiency in using the International System (SI) of Measurement

  3.5 Demonstrate knowledge and application of the scientific method in teaching science

  3.6 Demonstrate a knowledge of and an ability to provide instruction relative to science-related societal issues

4.0 Demonstrate an understanding of the interrelationships among various disciplines of science

5.0 Demonstrate an understanding of the interrelationships between science and other academic areas

6.0 Demonstrate an awareness of the economic and technological importance of the application of science

7.0 Demonstrate the ability to adapt science instruction to meet the varied needs, abilities, and interests of students

7.1 Demonstrate an ability to adapt instruction to the intellectual developmental stages of students

7.2 Demonstrate the ability to plan and execute lessons that make use of resources outside the school environment, such as field trips, speakers, special events, and community resources

7.3 Demonstrate the ability to plan and conduct a laboratory lesson which includes the concept(s), appropriate activity(ies), science process skills, science materials and equipment, and evaluation procedures

8.0 Demonstrate the ability to develop appropriate evaluation procedures to assess student performance

9.0 Demonstrate an understanding of the investigative nature of science

10.0 Demonstrate knowledge of current safety standards and state laws relating to conducting science laboratory activities

11.0 Science – Computer Competencies (Level II)

11.1 All Science teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Science Education by:

11.1.1 Exhibiting a working knowledge of computer technology

11.1.2 Being prepared to set up a computer terminal

11.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

11.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

11.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

11.2 Science teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

11.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

11.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, science lab data, and statistical analysis.

11.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Science Program (CAI) relative to the four major goal clusters described in the Competency-Based Curriculum.

11.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

11.3 The Science teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

11.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.

11.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Science education experiences

11.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

11.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

Specific Competencies

To obtain secondary science certification and/or endorsement, the teacher should acquire competencies from the following list which are appropriate for the type certification or endorsement being sought. (See "Certification and Endorsement Regulations" above.)

1.0 Biology

1.1 Be able to define the major divisions of biology

1.2 Know the characteristics of living and non-living things

1.3 Understand theories of how life on earth evolved and be able to give supporting evidence for these theories

1.4 Know the physical and chemical laws that biological substances obey

1.5 Know the major constituents of living matter

1.6 Understand major cell processes such as respiration, protein synthesis, photosynthesis, transport, reproduction

1.7 Know the structure and functions of plant and animal cells and their requirements for survival

1.8 Be able to prepare cells for observation and analysis

1.9 Understand genetic basis of living things, Mendelian genetics, current chromosome theory, types of genetic abnormalities, role of DNA, and associated macromolecule interactions

1.10 Understand variance and their importance to a population

1.11 Understand causes of mutations

1.12 Understand the diversity of living things

1.13 Understand the development and use of the universal system of classification and be able to devise a classification system for a list of organisms

1.14 Understand how an organism's structure, function, and behavior relate to its environment

1.15 Understand viral and bacterial structure and function and their relationships to other organisms, including people

1.16 Know some of the nutritional and reproductive adaptations that explain bacterial diversity

1.17 Be familiar with the protista kingdom

1.18 Understand how protozoans are important to humans

1.19 Understand the relationship of photosynthetic and nonphotosynthetic plants and of their importance to humans

1.20 Understand the basic features of the major groups of plants (vascular and nonvascular)

1.21 Understand the reproductive and vegetative trends observed in plants

1.22 Understand the factors which control the germination, growth, differentiation, and reproduction of vascular plants

1.23 Understand the function of hormones in the growth, differentiation, and reproduction of nonvascular plants

1.24 Understand the nature of invertebrates and their importance to humans

1.25 Understand the nature of vertebrates and their importance to humans

1.26 Understand human anatomy and human physiology

1.27 Know the major functions of the organs comprising the human body

1.28 Understand the effects of diseases (nutritional, pathogenic, genetic) upon the physiology of the human body

1.29 Understand the implications of social/ethical biology

1.30 Be familiar with contemporary issues such as abortion, birth control, venereal diseases, and genetic engineering

1.31 Understand the consequence of the use of drugs including alcohol, narcotics, and tobacco

1.32 Understand the nature of populations, communities, and ecosystems

1.33 Understand the energy flow within an ecosystem

1.34 Understand patterns of interaction within an ecosystem

1.35 Understand implications of technology on the environment

1.36 Be familiar with moral and ethical issues such as world hunger, population control, alternate energy sources, pollution control, world resource allocation, and endangered species

2.0 Chemistry

2.1 Understand how to use the appropriate mathematical techniques for chemical investigation

2.2 Know principles and application of general chemistry

2.3 Have an understanding of the following: conservation of matter and energy, atomic theory, periodic chart, chemical reaction, acids, and bases

2.4 Know the principles of analytical, inorganic, and physical chemistry

2.5 Be able to determine unknowns using basic principles of qualitative and quantitative chemistry

2.6 Be able to work problems that relate to chemical equilibrium, electrochemistry, and chemical kinetics

2.7 Know and apply the principles of thermodynamics

2.8 Know the principles of general physics

2.9 Know the general concepts of organic and biochemistry

2.10 Know aliphatic and aromatic compounds: alkenes, alkones, alcohols, acids, ring compounds

2.11 Know the major biochemical compounds: fats, proteins, carbohydrates, enzymes

2.12 Understand major biochemical reactions which occur in living things such as digestion and cellular metabolism

2.13 Know quantum mechanics as it relates to the chemical properties of substances

2.14 Understand the role of hydrogen to the modern atomic theory

2.15 Understand the dual nature of subatomic particles: wave, particle

3.0 Physics

3.1 Know how to use the appropriate mathematical techniques for physics investigations

3.2 Have thorough knowledge of measurement including knowledge of the SI system of measurement

3.3 Know how to use appropriate measuring devices

3.4 Understand classical physics

3.5 Understand Newtonian physics including gravitation

3.6 Understand celestial mechanics and optical principles

3.7 Know and be able to apply laws of thermodynamics

3.8 Understand the principles of optics

3.9 Possess a general knowledge of modern physics

3.10 Have knowledge of mass, change, radiation, atomic structure, relativity, and plasma physics

3.11 Possess a working knowledge of electricity and magnetism

3.12 Have knowledge of solid state electronics

3.13 Understand the basic concepts of alternating and direct current

3.14 Understand the current application of physics in everyday life

3.15 Have knowledge of the values associated with applying physics through technology to societal needs

3.16 Understand the implications of physics application to new and emerging technologies such as computers, robots, nuclear reactors, space vehicles, and sources of energy

4.0 Earth Science

4.1 Know the various areas of earth science and be able to explain the nature of studies in astronomy, geology, meteorology, climatology, oceanography, hydrology, and geography

4.2 Understand how the study of earth science is related to the study of other areas of science such as biology, chemistry, physics

4.3 Be familiar with careers related to each area of study in earth science

4.4 Know and understand the basic principles and concepts of geology

4.5 Know the relationship of kind and arrangement of atoms to the properties of atoms and to the properties of minerals and other materials of the earth

4.6 Know common rocks and be able to explain their origin and relationship to the rock cycle

4.7 Understand the ways the earth is continually changing and the forces that aid in this process (i.e., weathering, glaciers, wind, gravity, running water)

4.8 Understand how people affect the process of change

4.9 Understand the theory of plate tectonics

4.10 Know how maps serve as graphic models of the earth and be able to read basic types of maps (topographic, geologic, weather, etc.)

4.11 Understand the theory of uniformitarianism

4.12 Understand the techniques used to determine geologic dates

4.13 Understand how a geologic time scale is developed using relative and absolute ordering of events

4.14 Understand major types of physiographic features found in ocean basins such as ridges, trenches, continental shelves

4.15 Understand the different kinds of water movement in the ocean and the forces that cause these movements (waves, tides, currents, winds)

4.16 Understand (when possible) how coastal landscapes are changed by wind, waves, current, tides, and tectonic action

4.17 Know the structure of the atmosphere, the relationships between energy and atmospheric circulation and the resulting phenomena

4.18 Understand the water cycle and explain its relationship to the atmosphere and other processes on earth

4.19 Understand the effect the earth's rotation and different surfaces have on atmospheric circulation and temperature

4.20 Know the processes of cloud formation and forms of precipitation

4.21 Understand the relationship of air masses, fronts, and weather

4.22 Know how climate differs from weather

4.23 Know the basic concepts related to space and astronomy

4.24 Know theories of origin and features of the universe

4.25 Understand the sun's relationship to the solar system

4.26 Understand how energy is produced in stars

4.27 Be familiar with the history of space travel and the problems that have been encountered

4.28 Know the basic principles on which rockets operate

4.29 Know how space exploration has resulted in increased information about the earth

4.30 Understand how changes in people's behavior could improve life's chances for survival in the future

4.31 Understand how human activities have modified the environment both deliberately and inadvertently

SOCIAL STUDIES

(Grades 9-12)

A. Purpose and Nature of Social Studies Instruction in the Curriculum

The primary goal of social studies instruction is to provide each student the experiences necessary for attainment of the knowledge, skills and attitudes necessary for becoming an effective and contributing citizen.

To insure the realization of this primary goal, a balanced K-12 social studies program should enable each student to:

1. Develop concepts and make valid generalizations that provide insights into political, economic, and social behavior of people
2. Become proficient in geography skills and in the skills needed for problem solving, decision making, planning, and participation
3. Acquire knowledge about (a) the structure and functions of the social, political, and economic institutions in American society; (b) the development and unique characteristics of past and present societies; and (c) issues and problems which have persisted throughout history
4. Develop a system of values consistent with the fundamental tenets of democracy
5. Develop constructive attitudes toward diversity, change, conflict, and uncertainty
6. Develop an understanding of oneself and one's relationship to others and to environment

A balanced program of social studies education is basic to all learning in school. Social Studies is the single curriculum area whose subject matter is the entirety of human experience. It is in social studies classes that students put to use the skills introduced in other areas as they learn to understand and practice the art of living and working together in a productive and nondestructive manner. Social studies become the framework through which the basic skills are integrated, and through which other areas are naturally correlated.

The social studies program begins at the kindergarten level with the introduction of basic social studies concepts, and the consideration of individual and group relationships. In grades one, two and three, these basic concepts are expanded and new concepts introduced while studying the home, school, neighborhood and community.

Beginning at grade four and ending at grade seven, the program focuses on the study of specific areas of the world. The study at this level emphasizes geography, people, economics, government, and glimpses into the history of the region that is studied. North Carolina and the Southeastern Unites States are studied in grade four; the Americas in grade five; Europe and the U.S.S.R. in grades six; and Africa, Asia and the Pacific Islands in grade seven.

In grades eight and nine, there is a comprehensive study of the history of the United States and North Carolina. The study in grades ten through twelve includes world cultures and the United

States in today's world. The basic program is supplemented by individual courses in economics, geography, history, political science and sociology.

B. Guidelines for the Preparation of Social Studies Teachers

The program of preparation for social studies teachers should include approximately 35 percent (excluding instruction in methods) of the prospective teacher's total undergraduate program. The program should be developed in accordance with the following guidelines:

GUIDELINE 1: The program should assure that the student acquires an understanding of the social, political, geographical, economic and historic forces operating in society.

Preparation to teach social studies requires appropriate study converting anthropology, economic, geography, history, political science, and sociology. The study in each of these areas should give the prospective teacher an understanding of the scope and methodology of history and the social science disciplines. The student should be introduced to analytical skills, concepts, and generalizations of each discipline. The depth of comprehension should be developed well beyond the introductory level.

GUIDELINE 2: The program should provide for in-depth preparation in history and the social sciences plus an intensive study in one or more of the major disciplines.

Every prospective social studies teacher should have a broad base in history and the social sciences. In addition to the broad base, a student can concentrate in the study of history or one of the social sciences.

Both the broad and concentrated study should focus on the basic facts, concepts, generalizations, and methods of the discipline(s) studied. The prospective teacher should thoroughly examine the United States and other cultures. The prospective teacher should be afforded opportunities to understand the major social, political, environmental, and economic problems confronting the world. The program should be designed to show how differing environments, customs, and values condition individuals, groups, and societies.

Approximately one half of the undergraduate program should be devoted to history, social sciences, and the area of concentration.

GUIDELINE 3: The program should provide for the development of the skills required to formulate objectives, use resources, select content, use effective teaching strategies, evaluate learning outcomes, and interact with students, parents, and others.

The prospective teacher should be prepared to analyze student needs, formulate instructional objectives, and select materials for classroom use. The prospective teacher should also develop the ability to select, create, and use a variety of teaching strategies. Opportunities to design, identify, and use a variety of evaluation strategies should be provided each prospective teacher. The student seeking social studies certification should possess the ability to use a variety of resources to seek new information. The ability to take the perspective of others, use democratic classroom methods, and recognize and deal with controversial issues are necessary skills for the well-prepared social studies teacher. Preparation under this guideline should be a part of the professional program.

GUIDELINE 4: The program of preparation should develop an individual awareness of the need for continuing education and professional development.

Programs of pre-service education should develop in students an awareness of the necessity for continuing study. A constant renewal of social studies knowledge and skills should be provided through self-education, in-service education, and formal graduate study.

C. Competencies Needed by Teachers to Achieve Program Objectives

Knowledge of history and social sciences is a necessary ingredient for understanding concepts, generalizations and processes in social studies. Knowledge by itself, however, is of little use. The most important role of the social studies teacher is to foster development of student understanding of concepts, generalizations, and processes through the use of knowledge. These understandings are essential to the skills of thinking, reasoning, problem solving, and decision making -- ultimate goals of social studies instruction.

NOTE: Competencies required for endorsement in grades 9-12 content areas are: History: Competencies 1-5; Economics: Competencies 4,5,6,7,9,11; Political Science: Competencies 4,5,8,9,11; Geography: Competencies 4,5,10,11; Sociology: Competencies 4,5,6,12. Competencies 18-21 are required for all areas.

1.0 The major themes of U. S. History and their interrelatedness

1.1 Identify the major epochs of U. S. History

1.2 Illustrate a knowledge of the social, economic, political, cultural, and geographical characteristics that influenced each epoch

1.3 Understand the role of the United States in world affairs

1.4 Understand major events in North Carolina History

2.0 The major themes of European History

2.1 Identify major epochs of European History

2.2 Illustrate a knowledge of the social, economic, political, cultural, and geographical characteristics that influenced each epoch

2.3 Understand the European heritage of the United States

3.0 Other major civilizations

3.1 Identify African, Asian, and Latin American civilizations

3.2 Illustrate a knowledge of the social, economic, political, cultural, and geographical characteristics of one of these civilizations

3.3 Understand the influence of these civilizations upon the world

4.0 Significant current events

- 4.1 Describe the relationship between current affairs and antecedent developments
- 4.2 Use knowledge of past and current events to forecast about the future
- 4.3 Understand the interrelatedness of current events

5.0 The importance of global interdependence

- 5.1 Relate world events to the lives of students
- 5.2 Emphasize the universal consequences of events

6.0 How societies attempt to meet their economic goals

- 6.1 Describe different economic goals
- 6.2 Explain how economic systems reflect the values of societies
- 6.3 Understand economic interdependence
- 6.4 Understand the interaction of the political and economic system

7.0 The American economic system

- 7.1 Describe the theory of the free enterprise system, its history and foundation and the manner in which it is actually practiced
- 7.2 Understand how private ownership reflects the values of this society
- 7.3 Understand the role of the individual in determining production in a market system

8.0 The function of government

- 8.1 Understand the rule of law
- 8.2 Identify sources of authority within different forms of government
- 8.3 Explain how different forms of government view the role of the individual
- 8.4 Understand the international impact of national policies

9.0 The foundations, structure, and function of American government at local, state (NC), national, and international levels

- 9.1 Understand the jurisdiction of the executive, legislative, and judicial branches
- 9.2 Describe the interlocking relationships among the different levels of government

9.3 Explain the American political process in practice

9.4 Understand the uniqueness of the American system

10.0 Physical geography

10.1 Develop a sense of the distribution of the major features of the earth

10.2 Explain the influence of the physical and cultural environments on the distribution of settlement and land use

11.0 Political and economic geography

11.1 Understand the political divisions of the world

11.2 Describe the location and implications of the major concentrations of natural resources and the use of airspace and waterways

12.0 Social institutions and their influence

12.1 Describe the origins and influence of specific institutions such as family, religion, and education upon the individual and society

12.2 Understand the existence and effect of cultural diversity

12.3 Explain how institutions and groups affect each other

12.4 Understand that social institutions and their influence are subject to change

Performance Competencies

To demonstrate the capacity to acquire, process, and transmit information, the initially certified teacher of social studies should exhibit competence in:

13.0 Formulating objectives

13.1 Identify areas of exploration significant to student needs

13.2 Accurately identify factors of learning proficiency

13.3 Know the skills, attitudes, and values that are related to the knowledge to be conveyed

14.0 The use of resources

14.1 Know what resources are available and how to gain access to them

14.2 Organize and locate resources according to predetermined instructional objectives

14.3 Use multiple resources consistently

14.4 Read and interpret data given in a non-narrative form

15.0 Selecting and creating teaching strategies appropriate for instructional objectives

15.1 Lead discussions competently

15.2 Demonstrate strategies for organizing groups and assigning tasks appropriate to purpose and leadership

15.3 Use a variety of information-giving strategies

15.4 Use inquiry strategies

16.0 The use of facts, the development of concepts and formulation of generalizations

16.1 Demonstrate the ability to conceptualize by analysis and synthesis

16.2 Invoke rules of evidence of test hypotheses

17.0 The design and use of a variety of techniques of assessing and evaluating student progress

17.1 Use techniques appropriate to the instruction

17.2 Know the purpose of standardized tests and the appropriate use for standardized test results

Professional Competencies

To demonstrate the capacity to make professional choices and work in a school environment, the initially certified teacher of social studies should:

18.0 Demonstrate the ability to assume the perspectives of others

18.1 Consider the feelings and attitudes of administrators, colleagues, and students

18.2 Modify, in the light of new information, preconceived notions that have influenced actions toward others

18.3 Demonstrate an understanding of the dilemmas that are inherent in dealing with cultural diversity and understand why cultural diversity exists

19.0 Demonstrate democratic classroom methods that are consistent with the uniqueness of social studies

19.1 Involve students in decisionmaking

19.2 Demonstrate fairness and consistency in grading and setting standards for social and academic behavior

  - 19.3 Create a climate that is conducive to open exchange between and among teachers and students

  - 19.4 Recognize when conflicts exist and provide a framework for resolving student-teacher and student-student conflicts

- 20.0 Recognize and deal with controversial and sensitive issues

  - 20.1 Know community mores

  - 20.2 Demonstrate capacity to balance issues and take initiative when democratic principles are threatened or violated

- 21.0 Social Studies – Computer Competencies (Level II)

  - 21.1 All Social Studies teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Social Studies Education by:

    - 21.1.1 Exhibiting a working knowledge of computer technology

    - 21.1.2 Being prepared to set up a computer terminal

    - 21.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

    - 21.1.4 Performing computer operations: on/off sequence, loading/ execute/saving/copying programs

    - 21.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

  - 21.2 Social Studies teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

    - 21.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, etc.

    - 21.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, lab data and analysis.

    - 21.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Social Studies Program (CAI) relative to the seven major areas described in the competency-Based Curriculum: History, Geography, Economics, Political Science, Anthropology, Psychology, and Sociology.

21.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

21.3 The Social Studies teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

21.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.

21.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Social Studies education experiences

21.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

21.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

SECOND LANGUAGE STUDIES: CLASSICAL LATIN 9-12

A. Purpose and Nature of Classical Latin in the School Curriculum

The purpose of a program in Classical Latin is two-fold: (1) to study Latin vocabulary, structure, and syntax and the relationship of Latin to English and other languages to improve one's ability to speak, read, and write; and (2) to gain an appreciation of Roman culture and its influence on Western civilization. The primary immediate objective underlying the entire process of each year of Latin is progressive development of the ability to read and understand the language. This involves an increasing mastery of correct Latin pronunciation, of a selected vocabulary, and of essential inflection and syntax. Closely connected with these are the facility to read Latin at sight, to translate english sentences into Latin, and to understand both Latin and English word formation and derivation. Moreover, throughout the learning process, a greater understanding of the essentials of Western civilization and culture is fostered through the study of classical literature and Roman history, life, and institutions.

B. Guidelines for the Preparation of Latin Teachers

An evaluation of the previous language experience of applicants for admission to an institution's Latin program should be made through adequate testing procedures, and the admission to and placement in the teacher education program should be based on language skill evaluation and recommendation by staff members of the classics department.

In order to provide candidates of varied backgrounds and abilities with the opportunities to achieve the competence needed, the program should include preparation through courses, independent study, extracurricular activities, and opportunities for study abroad in accordance with these guidelines. The program of preparation should normally provide for approximately 25 percent (not including the elementary level of language preparation) of the four-year undergraduate program.

GUIDELINE 1: The program should emphasize reading with comprehension but should include oral and writing components.

The Latin program should stress reading with comprehension on the literal, interpretive, and critical levels. Instruction should emphasize a variety of classical Latin texts but could include exposure to medieval and ecclesiastical Latin. Oral language experiences should accompany reading instruction in order to enhance appreciation of texts that were originally written to be read aloud. In addition, oral and written activities bolster a student's knowledge of the Latin language.

GUIDELINE 2: The program should provide an emphasis on language analysis.

Preparation in this area should include a study of the phonology, morphology, syntax, and semantics of the classical language and comparison of these elements with those of the Romance Languages and American English. Instruction should include the study of word derivation for extensive vocabulary improvement.

GUIDELINE 3: The program should include a study of the literature, history, and civilization of ancient Rome.

This study should involve the major works of the literature and other aspects of the culture and civilization, including history, geography, mythology, art, architecture, and daily life. The study of the literature and culture should be largely, but not entirely, in the original language and should include training in the techniques of literary analysis. Attention should be given to the influence of Greece on Rome and the impact of Greco-Roman culture on Western civilization. The differences between ancient and modern societies should be noted.

GUIDELINE 4: The program should include instruction in methods, materials and equipment, and testing and assessment related to the teaching of Latin.

Preparation in this area should include a study of the present-day objectives of the teaching of Latin and a knowledge of the methods and techniques for attaining these objectives. It should include instruction in current theory and practices of teaching a second language, including the use of instructional materials, media and technology, appropriate evaluative instruments and procedures for measuring Latin proficiency and achievement, and effective classroom methods and techniques, as well as knowledge of the relationships between language and culture. In addition, the program should also prepare candidates to understand the relationship between second language study and other areas of the curriculum at all grade levels.

The program should introduce candidates to sources of current information and research in the field. The preparing institution should maintain a curriculum library containing the materials and equipment commonly used in teaching Latin and provide opportunities for reinforcement of classroom learning.

GUIDELINE 5: The program should include a study of language acquisition.

Preparation in this area should include the study of the processes of first and second language acquisition, and should include an analysis of the relationship between these two processes. Instruction should include a knowledge of the major contributions of leaders in the field of psycholinguistics; application of language learning theory to practical teaching strategies; and understanding of the ways in which children, young adolescents, adolescents, and adults learn first and second languages.

GUIDELINE 6: The program should include a study of the legislative and historical background of education for students of second language in the United States and in North Carolina.

Preparation should include study of the historical, legislative, and educational foundation of programs for students in second language studies. A study of the rationale for including Latin in the modern school curriculum should be part of the program.

GUIDELINE 7: The program should develop an awareness of the need for continuing education and professional development.

Prospective teachers should be informed about opportunities which are available through related organizations, programs, and resource materials and persons at local, State, and national levels. They should be encouraged to continue their education through inservice workshops, graduate work, participation in professional organizations, individual study, and travel/study programs abroad.

GUIDELINE 8: The program should include a study of the State Latin curriculum and how it fits into the public school curriculum.

Preparation should include participation in analysis and evaluation of the State Latin curriculum and local school systems' curriculum guides, as well as the development of a methods class curriculum project.

C. Entry-Level Competencies Needed by Teachers of Latin

Academic Skills and Knowledge

1.0 Read, comprehend, and translate authentic classical Latin texts

  1.1 Recognize and infer semantic and grammatical meaning of printed words in context

  1.2 Recognize in context a wide range of vocabulary without constant recourse to bilingual vocabulary lists

  1.3 Demonstrate comprehension of selected passages by answering questions based on literal meaning

  1.4 Summarize and critique material read

  1.5 Recognize, identify, and analyze organizational patterns, literary elements, and stylistic devices within written material

2.0 Demonstrate the ability to understand and pronounce oral Latin

  2.1 Recognize and understand Latin words, phrases, and sentences

  2.2 Say aloud written words, phrases, and sentences with generally accepted classical Latin pronunciation

  2.3 Read aloud Latin passages with expression, appropriate intonation, stress, and rhythm

  2.4 Formulate and respond in Latin to questions and commands

3.0 Write in Latin using correct syntax and morphology

  3.1 Prepare exercises of all kinds at the various levels for the construction of grammatically correct sentences in Latin, requiring the use of verbs in the indicative, infinitive, imperative, and subjunctive moods, and nouns in all cases with adjectival modifiers

3.2 Devise practice exercises for teamwork and peer evaluation of correctly structures composition in Latin

3.3 Compose sentences and paragraphs using appropriate vocabulary, sentence structure, grammatical forms, and spelling

4.0 Know vocabulary and language structure, including morphological, syntactical, and semantic elements

4.1 Compare and contrast vocabulary and structural elements within the Latin language and with those of English

4.2 Demonstrate how Latin uses number case, gender, agreement, verb endings, word order, and long and short vowels to express meaning

4.3 Show the linguistic heritage from Latin by listing and explaining English and Romance Language derivatives from the vocabulary learned, with emphasis on roots, suffixes and prefixes, and Latin expressions used in English

5.0 Possess general knowledge of the history, geography, literature, mythology, art, architecture, and daily life of the ancient Romans, noting also the influence of Greece

5.1 Locate on a map the major components of the Roman world at various stages of its history

5.2 Write about the major events, people, and achievements in Roman history

5.3 Discuss the major literary periods/movements in chronological order, being able to discuss the work(s) of at least one author of each period/movement

5.4 Identify, describe, and discuss the significance of the major monuments, archeological remains, and works of art from Roman civilization

5.5 Demonstrate a familiarity with Roman daily life, customs, and beliefs and how they differ from those of American society

5.6 Discuss the influence of Roman culture on Western civilization

5.7 Trace and explain the uses of and allusions to famous classical myths in ancient, medieval, and modern literature and art

Professional Skills and Knowledge

6.0 Identify and discuss the ways in which children, young adolescents, adolescents, and adults learn and acquire first and second language

6.1 Cite the major contribution(s) of leaders in the field of the psychology of language learning

- 6.2 Describe the relationship between the processes in first and second language acquisition
- 6.3 Compare and contrast the ways in which children, young adolescents, adolescents, and adults learn a second language
- 6.4 Describe and compare at least three different individual styles of learning
- 6.5 Experience the process of learning a new language or culture through an immersion experience, a language class, or a simulation game

7.0 Identify and discuss major methodologies and current trends in second language teaching as they relate to Latin

- 7.1 Cite and discuss the contributions of leaders in the field of second language education
- 7.2 State the major theoretical base for each methodology, and explain how each can be applied in an eclectic approach
- 7.3 State the major advantages, disadvantages, and the desired outcomes of each methodology
- 7.4 Categorize various techniques under the appropriate methodology

8.0 Employ various techniques and strategies for teaching Latin

- 8.1 Prepare and teach lessons demonstrating a knowledge of the various techniques and strategies
- 8.2 Demonstrate various strategies to teach reading comprehension and literature, including the selection of passages appropriate to the language and developmental level of a class
- 8.3 Choose and teach exercises and drills that develop the ability to use the structure and vocabulary of Latin
- 8.4 Plan and demonstrate activities that integrate Roman culture, language, and literature
- 8.5 Plan and demonstrate varied activities for word derivation
- 8.6 Develop activities to teach reading and writing as processes

9.0 Demonstrate the ability to select, adapt, and develop appropriate instructional materials for use in Latin instruction

- 9.1 Review different types of commercially-developed material (textbooks, audio-visual materials and equipment, broadcast and print media, and technology);

evaluate them for student appeal, level of difficulty, cultural content, instructional validity, and language level and adapt them for classroom instruction

9.2 Develop and demonstrate original instructional materials

10.0 Demonstrate knowledge of second language evaluative instruments and techniques

10.1 Evaluate standardized and teacher-made instruments, activities, and procedures to determine the following: the target group to be tested, the strengths and limitations of the instrument, the skills tested, and ways to use test results

10.2 Identify potential cultural biases in evaluative instruments

10.3 Develop and/or administer a formal or informal language placement test, and evaluate the results

10.4 Develop evaluative classroom instruments appropriate to the competencies taught at each level

11.0 Understand the history and legislation for second language education in the United States and in North Carolina

11.1 State the chronological events leading to legislation which has affected education for all public school second language learners in North Carolina

11.2 Outline the development of legislation which has influenced the education of second language learners in North Carolina

11.3 State how pertinent legislation has affected education programs for second language learners, identifying types of programs, settings appropriate for each type, and factors influencing program design

11.4 Trace the historical background of Latin education in the United States

12.0 Participate in curriculum development

12.1 Analyze second language and content area curriculum in light of student age, background, proficiency levels, and academic progress

12.2 Design, adapt, and/or revise instructional objectives and activities to accommodate the needs of the students to be served

12.3 Understand the State Latin curriculum and how it fits into and supports the total school curriculum at all grade levels

13.0 Demonstrate the ability to organize an effective Latin instructional environment

13.1 Create a learning-conducive environment which includes consideration for the emotional, intellectual, and physical needs of the student

13.2 Demonstrate the ability to develop second language instructional objectives to integrate language and cultural learning with the content areas of the school curriculum as well as through extra-curricular and community activities

13.3 Demonstrate the ability to assess, personalize, diagnose, and respond to individual learner needs (learning styles), including the needs of exceptional children

13.4 Demonstrate the ability to differentiate between major and minor errors and how and when to make corrections, provide feedback, and allow for delayed response

13.5 Prepare lessons that incorporate a variety of activities for individuals, small groups, and entire classes

Professional Growth

14.0 Keep abreast of current trends, issues, and research in the second language curriculum, instruction, and theory of language acquisition relevant to students in the United States and in North Carolina

14.1 Research and discuss the evolving administrative, educational, and legal aspects involved in planning, implementing ,and evaluating a second language program

14.2 Understand the benefits and implications of the implementation of a sequential study of second languages

14.3 Be familiar with current printed and non-printed texts and materials relating to second language teaching, including video, tapes, and computer software, and know how these materials can be obtained

15.0 Continue academic development and professional development

15.1 Be aware of opportunities for study and travel abroad in lands that were once a part of the Greco-Roman world

15.2 Submit research papers to professional journals, newsletters, or ERIC

15.3 Read current professional journals

15.4 Work in close collaboration with other departments such as English, history science, and modern languages in order to identify ways to enrich various learning experiences

15.5 Participate in Junior Classical League and Advanced Placement programs

15.6 Attend foreign language conferences and weekends, and sponsor travel/study trips abroad for Latin students whenever possible

15.7 Keep abreast of classroom materials and media available from such sources as the American Classical League, Educational Audio-Visual, Auxilium Latinum, Res Gestae, professional journals, and museum collections

15.8 Attend and participate in professional meetings, conferences, and events at local, state, and/or national levels

16.0 Promote cooperation among second language staffs, classroom teachers, school administrators, college and university personnel, and members of the community

16.1 Meet with content-area teachers and share materials, techniques, and strategies

16.2 Work with paraprofessionals (assistants, tutors, parents) and volunteers in selecting and using appropriate methods and materials

16.3 Learn how to communicate periodically with parents and school administrators about program goals and student progress

16.4 Know of and work with the collaboratives (the cooperative effort between local schools and colleges and universities)

17.0 Latin Computer Competencies (Level II)

17.1 Demonstrate an understanding of basic concepts of computer hardware in relation to Latin education by:

17.1.1 Exhibiting a working knowledge of computer terminology

17.1.2 Being prepared to set up a computer terminal

17.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

17.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

17.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," " mini," and "micro" computers

17.2 Demonstrate a knowledge of Computer Assisted instruction (CAI), Computer Managed Instruction (CMI) and Authoring Programs by:

17.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

17.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment and materials, purchase requests, language lab data and analysis

17.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in Latin (CAI) relative to the curriculum

17.2.4 Being familiar with Authoring Systems and knowing how to use these specifically designed software programs for instructional purposes

17.3 Demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

17.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, etc.

17.3.2 Knowing how videotape recorders and video disk recorders enhance Latin experiences

17.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

17.3.4 Exhibiting an awareness that technology is constantly changing and that the individual professional must actively seek information pertaining to the on-going status of electronic technology

GUIDELINES FOR GRADUATE LATIN EDUCATION PROGRAMS

The program for graduate preparation of Latin teachers should provide flexibility to the extent that each student's program would become a planned extension of work taken at the undergraduate level, in a logical and cohesive whole leading to a master's degree and graduate certification. If a sixth year or specialist certification is sought, the program planned would be an extension of work taken at both the undergraduate and master's levels. Graduate programs should extend the individual's breadth of knowledge and understanding in both the Classics and in education. Moreover, graduate study implies that the teacher is prepared to assume, at a higher level of competency, the professional responsibilities for development, implementation and delivery of classical Latin instruction in the public schools.

GUIDELINE 1: The program should provide a linguistic study of Latin which might include advanced grammar, history of the Latin language, Italic dialects, or comparative Greek and Latin grammar.

GUIDELINE 2: The program should provide the opportunity for study of the full range of Latin literature, including a discussion of literary theory.

GUIDELINE 3: The program should include in-depth study of selected Latin authors.

GUIDELINE 4: The program should provide the opportunity for cognate areas of study which might include one or more of the following: history, philosophy, art and archaeology, Greek.

GUIDELINE 5: The program should provide opportunities to refine methods and techniques for teaching Latin.

GUIDELINE 6: The program should include study of research methods and curriculum development.

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DRIVER AND TRAFFIC SAFETY EDUCATION

A. The Purpose and Nature of Driver and Traffic Safety Instruction in the Secondary School Curriculum

Public Education is concerned with promoting the welfare of the society as well as that of individuals within it. The safety aspect of the overall welfare is promoted through general safety education and driver education in the school setting. Opportunities are provided for students to develop the knowledge, skills, and habits necessary for the prevention of accidents in the home, in the environment and in traffic. Driver education is an integral part of the state's sequentially planned, comprehensive K-12 safety education program including home, work, school, recreation, and traffic safety as outlined in the State Board of Education Standard Course of Study and the Teacher Handbook For the Competency-Based Curriculum.

The program in driver and traffic safety education is structured to serve students 14½ to 18 years of age. It is normally offered during, but not restricted to, the sophomore year of high school. An approved course should consist of a minimum of one semester or equivalent of instruction.

B. Guidelines for the Preparation of Driver and Traffic Safety Education Teachers

The program should provide for the development of competencies on an individual need basis. The study and experiences should consist of approximately 25 percent of the four-year program and should be in accordance with the following guidelines:

GUIDELINE 1: The program should provide a general understanding of the broad areas of transportation in relation to the movement of goods and the travel of people.

The program should provide a general study of transportation in a technologically advanced, urbanized society, including transportation needs as related to the movement of goods and the travel of people in relation of their work and recreation; the various mode of transportation in use; the extent to which each is used, including the employment of people in its operation; the demands and implications of each facet of the transportation system in relation to the construction of facilities and roads, the transportation and related problems now confronting people living in highly industrialized, heavily populated areas, including ecological problems affected by transportation; the psychological and sociological factors that directly influence group and individual attitudes and behavior patterns, particularly in relation to the massive use of motor vehicles.

GUIDELINE 2: The program should include and introduction to the general field of safety.

The study of safety should include a survey of the facts relating to accident occurrence; the number and types of accidents, the major causes of them and their cost in loss of manpower and in human misery. It should also include a consideration of ways to prevent accidents through activities such as the design, construction, and use of machines, equipment, and facilities; the elimination of occupational and fire hazards; legislation; the work of safety councils and committees; and education.

GUIDELINE 3: The program should include specialized study in the area of Driver and Traffic Safety Education.

The program should include concentrated study in driver and traffic safety education, including the motor vehicle transportation system, its extent, and the means by which it is regulated, such as law, law enforcement, mechanical devices, and highway and street construction; the causes and prevention of motor vehicle collision; the development, maintenance, and use of safety devices; traffic hazards, pedestrian and vehicle, including those created by the use of alcohol and drugs; and the development of advanced driving skills, with particular emphasis on defensive driving.

GUIDELINE 4: The program should provide preparation through study and experience in the use of appropriate methods, strategies, media, and materials.

The program should include opportunities for the prospective teacher to develop expert skill in the use of driver education facilities, equipment, materials, media, strategies and techniques. Work on driving ranges, in driver education laboratories, and with simulation equipment and materials should be included in the program as well as direct experience at a public school for an extended period with driver education students.

GUIDELINE 5: The program should provide preparation in organizing and administering a program in driver and traffic safety education.

The study should include organizing and scheduling students for instruction in the program as a regular part of the school's operations; the planning and implementation of instructional activities including the acquisition and use of facilities, equipment, materials, and media essential for effective learning; provision for insurance, the establishment and maintenance of working relationships with community groups and organizations; and keeping records and filing reports

GUIDELINE 6: The program of preparation should develop an awareness in the individual of the need for continuing education and professional development.

The increasing knowledge emerging from current research relative to safety and the use of motor vehicles mandates continuing study by the teacher in order to maintain professional competency. Professional development on a continuing basis can be achieved through organized independent study, in-service education, and formal graduate study.

C. Competencies Needed by Teachers to Achieve Program Objectives

1.0 Discuss the importance and magnitude of the transportation system in a highly industrialized, technological, and urbanized society

- 1.1 Define the purpose of the transportation system in the United States
- 1.2 List the major components of the United States transportation system
- 1.3 Describe the benefits and role of each component of the transportation system
- 1.4 List the various types of roadways in the United States and in North Carolina

1.5 Explain the procedures used by governments to finance and manage roadways

2.0 Be aware of and discuss the sociological, psychological, and ecological problems related to the operation of our massive transportation system

2.1 Describe the sociological, psychological, and ecological characteristics of mass transportation in our society

2.2 Outline advantages and disadvantages of our massive transportation system

2.3 Categorize mass transportation problems as they relate to social, psychological, and ecological problems in the United States

2.4 Trace the history of mass transportation as it relates to social, psychological, and ecological problems in the United States

2.5 Elaborate upon probable solutions to our mass transportation problems

2.6 Identify organizations that can deal efficiently with social, psychological, and ecological problems

3.0 Discuss the roles of transportation in the operation of the economic system

3.1 Outline the historical development of our transportation system as it parallels our economic progress

3.2 Relate our economic dependence to each component of our transportation system

3.3 Identify the economic relationships between business/industry and the transportation system

3.4 Describe the economic relationship of transportation to people mobility

3.5 Specify the economic aspects of our national resources as they relate to transportation

3.6 Depict the degree to which recreational transportation is reflected in our economy

4.0 Recognize the numerous employment opportunities available in the field of automotive transportation, highway and general safety, and related areas.

4.1 Relate historical statistics which show the growing numbers of people employed in the total transportation industry

4.2 List job opportunities which pertain to each area of the transportation system

4.3 Describe the personal qualifications necessary for entry into each segment of the transportation system

4.4 List organizations which prepare prospects for various careers within the transportation system

4.5 Outline the process by which a student can direct himself/herself toward a desired and appropriate career

4.6 Describe the vastness of the transportation system as it relates to other fields of employment

5.0 Discuss the roles of the driver, the vehicle, and the environment and their interrelationships in traffic phenomenon as elements of our highway transportation system

5.1 Describe the systems approach to the study of the highway transportation system

5.2 Depict the role of the driver in our society

5.3 Outline the evolution of the automobile in our society

5.4 Describe the effects of the automobile in our environment

5.5 Give your concept of the driving task as it relates to the beginning driver

5.6 List four driving environments and describe the behavior expected of a driver in each

5.7 Describe the capabilities and limitations of the vehicle driver.

5.8 List at least three types of vehicles and describe their capabilities which require restrictions upon their use under various circumstances

5.9 Write your concept of the future roles of the driver and vehicle in our society

6.0 Discuss the social and psychological factors that have an impact on the development of attitudes and values in relation to driving

6.1 Describe the phenomenon of social environment on certain kinds of attitudes

6.2 Formulate and utilize an instructional procedure to aid in modifying undesirable peer influence on driving behavior

6.3 Identify characteristics of undesirable driving attitudes

6.4 Relate appropriate information and utilize strategies which may assist in modifying attitudes

6.5 Describe the effect of group dynamics on one's behavior

6.6 Link accident susceptibility to emotional instability, including the influence of alcohol and drugs

6.7 Utilize group activities as a means to illustrate methods of controlling emotions

7.0 Discuss the physical, mental, and attitudinal growth characteristics of teenagers as they apply to the operation of the motor vehicle

7.1 Identify physical requirements necessary to perform the driving task

7.2 Measure, interpret, and relate information about specific physical deficiencies as they relate to safe operation of a motor vehicle

7.3 Prescribe measures for correcting or compensating for the various physical deficiencies pertinent to the safe operation of a motor vehicle

7.4 Relate how over-extending one's physical and/or mental abilities contributes to the increase in the possibility of an accident

7.5 Offer suggestions that will fulfill youth's need for adventure in a satisfying, healthy, and safe manner

7.6 Relate both physical and mental abilities to the operation of a motor vehicle

8.0 Describe the basic function of the automobile

8.1 Describe the function of the various automotive systems and sub-systems and their maintenance requirements

8.2 Interpret instruction in the owner's manual as it relates to preventive maintenance for various automotive systems

8.3 Indicate the most frequent cause of road service due to breakdowns

8.4 List common symptoms of tire problems

8.5 Describe how seasonal changes influence car care

9.0 Discuss the natural and man-made laws that govern the operation of motor vehicles and the effect on their occupants

9.1 Identify and describe natural laws that are factors in controlling the vehicle

9.2 Identify factors which will reduce the amount of friction necessary for vehicle control

9.3 Describe why road design should be a factor in the choice of speed

9.4 Describe how comprehension of traffic laws tends to contribute to an orderly society

9.5 Explain why self-enforcement is a more desirable form of enforcement

9.6 Identify the types of restraint systems and the advantages of their use

10.0 Discuss the concepts and interrelationships of laboratory and classroom instruction

10.1 Explain the phenomenon that a thorough knowledge of traffic laws and regulations tends to foster an obedience to the law

10.2 Describe the interrelationship of the perception of driving hazards and performance

10.3 Describe the interrelationship of the affective, cognitive, and psycho-motor domains in learning to operate a motor vehicle safely

11.0 Plan instruction designed to meet specific learning objectives for driver and safety education

11.1 Explain the concept "Analysis of the Driving Task" and relate it to the objectives of driver and safety education

11.2 Develop and write behavioral objectives in driver and safety education

11.3 Develop a teaching unit for each area of instruction (classroom, multi-media, simulation, range and behind-the-wheel, on-street) including a comprehensive lesson plan expressed in behavioral terms

11.4 With respect to the instructional units, list the various concepts and content embodied in the instructional unit and draw meaningful relationships among the concepts as they relate to the objectives of driver and safety education

11.5 Explain and demonstrate the effective use of each of the following:

11.5.1 Large group instruction

11.5.2 Small group instruction

11.5.3 Role playing

11.5.4 Involving students in outside and supplementary instructional activities

11.5.5 Identifying and presenting appropriate materials for the instructional unit

11.6 Identify the competency level of the student upon entry in each of the sequential instructional units

11.7 Identify the competency level of the student upon exit from each of the instructional units

11.8 Select and use appropriate evaluative techniques to test specific learning objectives

12.0 Develop and use appropriate techniques and environments for teaching driver and safety education

  12.1 Identify problem areas of students both individually and collectively

  12.2 Identify potential traffic hazards present in the various driving environments

  12.3 Predict probable actions student drivers might take as a result of potential traffic hazards

  12.4 Give appropriate instruction and/or direction to help student drivers safely handle situations in different driving environments

  12.5 Be able to select appropriate instructional techniques to handle student problems

  12.6 Be able to select and/or develop appropriate learning experiences to help students cope with potential traffic hazards

  12.7 Explain and/or demonstrate appropriate action in emergency situations that may arise in the classroom or laboratory phase as they apply to the following or similar situations:

    12.7.1 Current first-aid practices

    12.7.2 Emergency situations that may occur on the range or in the vehicle

  12.8 Demonstrate good judgment in taking control of the vehicle and use appropriate techniques for taking control of the vehicle

13.0 Design and implement learning experiences which develop decision-making and problem-solving skills in student drivers of varying capabilities

  13.1 Determine the physical and mental capabilities and/or limitations of the student

  13.2 Identify physical and mental problems which various students may possess

  13.3 Relate the student's physical and mental problems to the various aspects of the driving task

  13.4 Design and implement appropriate learning experiences of a decision-making nature to meet the individual needs of students' varying capabilities

  13.5 Identify and explain the different steps in the decision-making process

  13.6 Adapt the different steps in the decision-making process and the appropriate learning activities to meet the student's mental and physical problems

14.0 Identify and use other resources (materials and persons) to complement and supplement the learning opportunities provided in driver and safety education

  14.1 Identify and utilize a variety of resource materials and persons to complement and supplement learning opportunities

  14.2 Describe steps for obtaining needed resource materials

  14.3 Describe steps needed to obtain services of resource persons

  14.4 Effectively utilize resource materials and persons in improving the quality of instruction

15.0 Possess the ability to organize and administer the driver and safety education program

  15.1 Describe different administration and educational considerations necessary in organizing a driver and safety education program

  15.2 Outline the classroom and laboratory content and experiences necessary in a comprehensive driver and safety education program

  15.3 Explain the interaction and relationship between classroom and laboratory instruction

  15.4 Outline the steps necessary to procure different materials, equipment, and facilities needed in the development of a driver and safety education program

  15.5 Describe the total and/or State regulations and procedures for obtaining driver education automobiles

  15.6 Demonstrate the ability to work effectively with teachers and school administrators on both the local and State level in developing a driver education program

  15.7 Demonstrate the ability to coordinate and schedule different types of driver education programs including simulation, range, and multi-unit programs

  15.8 Be aware of sources of funds for developing and supporting driver education programs

  15.9 Identify the Occupational Safety and Health Administration standards that apply to a public school system

16.0 Possess the ability to work effectively with professional and lay individuals and groups in program development, including expertise in public relations

  16.1 Identify different individuals and groups within the community and State who possess expertise and interest in the broad area of traffic safety

16.2 State a well-defined philosophy and set of objectives in driver and safety education

16.3 Communicate with individuals and groups the purpose and objectives of driver and safety education

16.4 Show empathy for the problems and ideas of individuals and groups working in driver and safety education

16.5 Explain the relationship of driver and safety education to the local, State, and federal safety programs, including pupil transportation programs

16.6 Explain the relationship of driver and safety education to the total school curriculum

17.0 Recognize the need and personal responsibility for continuing professional development

17.1 Describe why current and accurate information in all areas of traffic safety is imperative to do an effective job of teaching

17.2 Read several professional publications in driver and safety education on a regular basis

17.3 Indicate ways of upgrading competencies through in-service education programs, college and university courses, and attendance at professional meetings

17.4 Describe how one can contribute to the profession through self-improvement activities, including participation in research activities

17.5 Demonstrate a commitment to the profession through self-improvement activities, including participation in State and locally sponsored activities

18.0 Discuss safety-related concerns as they affect comprehensive safety programs

18.1 Define the terms "safety," "safety education," "accident," "accident causation," and "accident occurrence" as related to safe living practices

18.2 Survey the factors related to accident occurrence

18.3 Discuss the nature, the types, and the economic consequences of accidents

18.4 Develop and discuss the use of accident investigation studies and procedures as they apply to traffic safety

18.5 Discuss various accident countermeasure theories in use today and their relationship to traffic safety

18.6 Discuss the role and the purpose of OSHA standards

18.7 Describe the effects of Federal and State government standards plus agency legislation on the highway transportation system user

18.8 Identify the "Three E" concept as it applies to driver and traffic safety education

18.9 Discuss the role and impact of education, enforcement, and traffic engineering on the highway transportation system user

18.10 Discuss the impact of safety agencies and organizations in the field of driver and traffic safety education

19.0 Identify the physical, emotional, and social effects on the driver who is under the influence of alcohol and other drugs

19.1 Describe how drugs and alcohol are symptomatic of other problems

19.2 Relate how alcohol and drugs affect the driving task

19.3 Define a variety of legalistic terms relative to alcohol and drug use by highway transportation system members

19.4 Describe and explain the precise meaning of laws related to alcohol and other drug use and driving

19.5 Discuss enforcement and judicial considerations related to alcohol and drug use by members of the highway transportation system

19.6 Describe the physiological, psychological, and pharmacological effects of alcohol and other drugs on highway transportation system users

19.7 Distinguish and discuss facts from fiction concerning the effects of alcohol and other drugs on the highway transportation system user

19.8 Describe the contributing roles alcohol and other drugs play in highway crashes for a variety of populations

19.9 Describe the societal and cultural effects of alcohol and other drugs on highway transportation system users

19.10 List and discuss the impact of agencies and treatment centers on alcohol and drug users (and their families) in the highway transportation system

19.11 List and describe a variety of countermeasures used to deal with the problems of alcohol and drug use in driving

19.12 Describe and discuss a variety of educational approaches used in discussing the effects of alcohol and other drugs on the driving task

19.13 Construct a model countermeasures program for dealing with problems associated with alcohol, drug use and driving

19.14 Discuss and take positions on a variety of issues related to alcohol, drug use, and driving problems

19.15 Plan, execute, and evaluate a program to deal with a portion of the problems associated with alcohol, drug use and driving

19.16 Discuss the physical effects of alcohol and drugs on the operator

19.17 Explain the phenomena that some contend they can control the effects of drinking

19.18 Develop techniques and strategies which will exhibit the effects of alcohol and drugs on physical performance

19.19 Design an instructional strategy to illustrate the emotional effects on the body of consuming chemical substances

19.20 Identify instructional equipment to be employed in demonstrating the influence on the body of consuming chemical substances

19.21 Illustrate how the uninformed use of drugs and alcohol in the traffic scene contribute to the social dilemma

19.22 Draw a relationship between a disabling injury to the family head and an increasing probability of juvenile problems

20.0 Describe the relationship between fuel conservation and the operation of the motor vehicle

20.1 Discuss the nature, extent, and consequences of the effect that the fuel shortage has on American society

20.2 Identify ways of reducing fuel consumption in motor vehicles

20.3 Draw a relationship between the needle movement on the vacuum gage and fuel usage (mpg)

20.4 Describe the effect that uneven and improper acceleration has on fuel consumption

20.5 Describe the importance of trip planning and fuel conservation

20.6 Contrast the wear and tear between a cold and a warmed-up engine

20.7 Describe and discuss various "good driving techniques"

20.8 Discuss the advantages and disadvantages of vehicle maintenance

20.9 Describe the effects of different types of oils on engine operation

20.10 Discuss the effects of tires (types, condition, inflation) on fuel consumption

20.11 Discuss the effects that speed has on fuel consumption

20.12 Discuss the effects of vehicle drag on fuel consumption

20.13 Contrast the amount of fuel used by a vehicle traveling at highway speeds running a car air conditioner with a vehicle not using a car air conditioner and the windows down

20.14 Discuss the factors that should be considered in vehicle purchase and use

20.15 Discuss the advantages that accurate record keeping has on fuel consumption

20.16 List at least three types of vehicles and describe the capabilities which require restrictions upon their use under various circumstances

20.17 Describe a positive relationship between operating a car safely and operating a car economically

20.18 Describe ways in which the transportation system can contribute to energy conservation

20.19 Explain how the conservation of energy will affect people and the mass transportation system

20.20 Explain the economic effects that energy conservation has on the transportation system

21.0 Be able to work with the handicapped person as a driver education student

21.1 Describe the types of controls available for physically handicapped drivers

21.2 Demonstrate the ability to attach and use various types of controls to a vehicle

21.3 List businesses which sell controls for the handicapped driver

21.4 Demonstrate the ability to work with a physically handicapped driver in a vehicle

21.5 Describe the concerns a teacher must consider when dealing with a driver who has a hearing impairment or is physically handicapped

21.6 Demonstrate the ability to work with a driver who has impaired hearing

21.7 Utilize the theory of reinforcement in teaching the various phases of driver and safety education

21.8 Create learning situations that will dramatize the need for cooperation of all people working together to resolve our traffic problems

21.9 Describe the assessment procedures, including IEP, for determining the capability of the student to safely handle a motor vehicle

21.10 Describe the procedure for placing a student in a handicapped program

21.11 Identify State laws and/or DMV regulations governing the operation of a motor vehicle by a mentally and/or physically handicapped student

21.12 Identify and describe the various levels of mental retardation and describe the general problems and/or characteristics of students in each of the levels of impairment

21.13 Associate (be specific) the relationship between the general learning difficulties and those problems associated with the driving task

21.14 Identify and describe at least three ways of implementing a high school driver education program for the mentally handicapped

21.15 Be able to outline the content of high school driver education programs for the handicapped student, including specific teaching techniques for various content areas

21.16 Identify and describe the various resources which will provide a more meaningful education program for the handicapped student

21.17 Demonstrate the ability to work with the mentally handicapped driver or describe the procedure used in teaching the mentally handicapped driver in a motor vehicle

22.0 Have an understanding of motorcycle safety as a part of the highway transportation system

22.1 Describe the advantages and disadvantages of owning and operating a motorcycle

22.2 Demonstrate an understanding of traffic accident facts as they relate to motorcycles

22.3 List the North Carolina State laws that deal with the motorcycle

22.4 List resource organizations which deal with motorcycle safety information

22.5 Discuss the problem that motorcycle drivers encounter with other motor vehicles

23.0 Depict the importance of law enforcement in the transportation system

23.1 Describe the function of law enforcement as it relates to traffic safety

23.2 Demonstrate an understanding of traffic laws and the justice system as it relates to traffic safety

23.3 Describe the use of law enforcement personnel as resource people in the classroom

23.4 List organizations that prepare and distribute audio-visual and written materials dealing with traffic law enforcement

23.5 Describe strategies that will tend to develop desirable attitudes toward enforcement agencies

24.0 Possess the ability to organize and conduct instruction in driver and safety education utilizing the interdisciplinary approach to involve the various disciplines taught in the public schools

24.1 Define interdisciplinary in the context of educational programs

24.2 Develop a definitive rationale for implementation of interdisciplinary methods of instruction involving other disciplines

24.3 Illustrate how the interdisciplinary approach possesses the potential for greater conceptualization of the various disciplines involved

24.4 Outline a strategy to acquire the cooperation of other school personnel in the interdisciplinary approach to curriculum enrichment

Professional Skills/Techniques/Methodologies

25.0 In order to plan for effective instruction, the teacher of driver education should be able to:

25.1 Design instructional units dealing with the classroom and laboratory phases of driver education

25.2 Demonstrate the ability to operate and do minor repairs of multi-media equipment

25.3 Show the ability to demonstrate the operation of vehicles used in the laboratory phase of driver education

25.4 Indicate a knowledge of the mechanical aspects of an automobile

25.5 Demonstrate the operation of a simulator using proper techniques and strategies

25.6 Demonstrate the use of psychophysical equipment used in driver education

25.7 Demonstrate the ability to schedule driver education within the scope of a school's master schedule

25.8 Indicate a knowledge of the record keeping requirements for driver education students

25.9 Indicate a knowledge of legal requirements that a teacher must follow when students enter and exit the program

25.10 Outline and describe the North Carolina Administrative Code dealing with driver education

Professional Values

26.0 In order to promote driver education in the classroom, school and community, the teacher of driver education should:

26.1 Indicate a knowledge of North Carolina and national driver license procedures and requirements

26.2 Demonstrate a thorough knowledge of multi-disciplinary aspects of driver education instruction

26.3 Outline an effective public relations program for driver education in the public schools

26.4 Play an active part in driver education professional associations on the local, State and national levels

Competencies Considered Valuable But Not Essential in Driver and Safety Education

27.0 Demonstrate the ability to operate various types of two-wheeled vehicles including motorcycles

28.0 Demonstrate the ability to instruct and administer an advanced driver maneuvers program

29.0 Become certified to teach adult classes in DDC, driver improvement, DUI, and other service type programs

30.0 Acquire the ability to conduct and interpret research in the area of safety education

31.0 Demonstrate the ability to set up and conduct an advanced high school driver education program

GUIDELINES FOR ADVANCED SECONDARY EDUCATION PREPARATION PROGRAMS

The program for each candidate should be planned as a logically-organized whole, in continuation of the previous study and in relation to performance on screening procedures. A minimum of 60 percent of the graduate work should be in the discipline of the teacher's subject or academic field, and a minimum of 20 percent should be free for additional work in the subject field, in professional education, or for any graduate work that would add to the general competency of the individual.

For teachers prepared to teach in two subject fields at the undergraduate level and desiring to continue certification in both fields at the graduate level, the concentration must include each area, with the work about equally divided. In this situation, the concentration would constitute approximately 80 percent of the program, instead of 60 percent, with the remainder of the program devoted to professional study.

The master's degree program should provide preparation called for by each guideline, and the sixth-year and doctoral programs should be designed to develop breadth and depth in the same areas. The study should be planned so that programs meet the following guidelines:

GUIDELINE 1: The program should provide for concentrated study in the teacher's subject field or fields.

Study in the subject field should be characterized by flexibility and differentiation in recognition of individual needs and differences in backgrounds of education and experience.

GUIDELINE 2: The program should extend the teacher's understanding of the basic humanistic and behavioral studies relating to teaching and learning.

Study under this guideline should be a logical extension of undergraduate study dealing with the nature and purposes of education; the school curriculum; the problems and issues relating to education in their historical and philosophical aspects; and the concepts and principles within the behavioral sciences that have implications for education.

GUIDELINE 3: The program should broaden and deepen the understanding of teaching and learning theory through advanced study accompanied by appropriate clinical experiences.

Preparation under this guideline should include advanced study in the body of knowledge dealing with teaching and learning theory. The study and clinical experiences should enable the teacher to understand the theoretical principles that explain accepted professional practices and extend the ability to make practical applications.

GUIDELINE 4: The program should assist the teacher in gaining greater insights and skills in the use of the techniques of research and in designing and carrying out research projects.

Emphasis in this area should be on the study of research methods and findings, and on giving the teacher the necessary understanding and skills to develop action research in classroom situations and to extend the ability to utilize information from research reports in improving learning situations.

Exceptional Children and Youth (K-12)

EXCEPTIONAL CHILDREN AND YOUTH

A. Purpose and Nature of Programs for Exceptional Children and Youth

Exceptional children and youth are those who differ in physical, mental, or emotional characteristics to a degree that school programs designed for the majority of children and youth do not afford them opportunities for maximum adjustment or progress. Therefore, they need special instructional and/or supportive services to achieve and adjust to the highest level consistent with their abilities. The purposes of special education programs are to identify and provide for the typical educational needs of children and youth through identification, evaluation, placement, and individualized instruction.

B. Guidelines for the Preparation of Teachers of Exceptional Children

The program for the preparation of teachers for the education of exceptional children should be planned in accordance with the following guidelines:

GUIDELINE 1: The program should provide for a survey study of all exceptionalities including implications for education

The preparation should give emphasis to the variety of factors which impinge upon exceptional children and youth including a recognition of their social, emotional, and physical characteristics; their educational and vocational potential; and opportunities to observe programs concerned with their education, health, and welfare, such as instructional programs in public schools, residential facilities, sheltered workshops, and special centers.

GUIDELINE 2: The program should provide preparation in an area of concentration in sufficient depth to develop the required competencies.

The areas of concentration are: Specific Learning Disabilities; Speech-Language Impaired; Mentally Handicapped; Behaviorally/Emotionally Handicapped; Physically/Orthopedically Handicapped; Severely/Profoundly Handicapped; Cross-Categorical; Visually Impaired; and Hearing Impaired.

It should be noted that the variables which serve to label and categorize educational administrative programs are not entirely appropriate when applied to children. However, for purposes of clarity in program planning, the areas of concentration are described. Preparation under this guideline should provide concentrated study in an area of exceptionality. Approximately 20 percent of study in an undergraduate preparation program should be in the areas of specialization. The program should provide capability of knowledge for educational diagnosis, evaluation and prescription in a variety of educational or clinical settings, language-communication development, educational media, and socio-cultural implications.

GUIDELINE 3: The program should include work in fields related to the area of concentration.

It is strongly recommended that preparation programs go beyond categorical demarcations. Related work should be chosen from academic fields which will enable the teacher to meet more effectively the needs of exceptional children and youth. Such study may be concerned with other areas of exceptionality, and/or supporting areas, such as one or more of the behavioral and life sciences.

GUIDELINE 4: The program should provide for competencies in methodology, techniques of instruction, diagnosis, evaluation and prescription, use of specifically-related equipment and, practicum experiences to ensure effective utilization of these skills.

The preparation should include a study of the present-day objectives of exceptional child education and develop an understanding of methods and techniques suitable for attaining those objectives. It should develop knowledge of a skill in the use of educational media appropriate for teaching-learning.

GUIDELINE 5: The program should develop an awareness of the need and the disposition for continued learning in the field of exceptional child education.

The program should develop within students the attitude that learning is exciting and rewarding, and that studying to keep abreast of new developments, applications, and pedagogy must be a lifetime professional commitment for the teacher. Avenues open for further professional development include in-service education, independent study, and formal graduate study.

C. Competencies Needed by Teachers of Exceptional Children

Core Competencies

Special education teachers or clinicians should possess the competency to serve exceptional children directly and to serve as resources or consultants to other teachers. The competencies listed below are minimum competencies required for all initially certified teachers of exceptional children.

1.0 The initially certified teacher of all areas of exceptional children certification should be able to:

  1.1 Describe the concepts of "normal" vs. "exceptional"

  1.2 List and discuss the general, physical, psychological, educational, and behavioral characteristics of various exceptionalities and be able to:

    1.2.1 Identify and contrast the major historical and current definitions of children with special needs

    1.2.2 Identify nationally prevalent figures of major areas of exceptionalities

    1.2.3 Identify the primary learning and behavioral characteristics that discriminate, by definition, the various categories of children with special needs in North Carolina

  1.3 Describe the various etiologies of children with special needs

1.4 Describe the major social, biomedical, developmental, psychological, and other theories and their implications for understanding children with special needs

1.5 Describe the dynamics of children with special needs in terms of impact on the family

1.6 Describe the major current trends and attitudes and major historical forces which influence the provision of services for children with special needs

1.7 Describe North Carolina and Federal legislation and State Board Rules pertaining to children with special needs

1.9 Describe public and private services for the special needs of individuals for various ages

1.10 Discuss the philosophical basis for the delivery of services to children with special needs

1.11 Identify and describe the major public and private agencies and organizations providing support services to children with special needs

1.12 Describe the process of test development as it relates to formal test development and informal test development

1.13 Describe relevant areas/issues related to testing to include the following:

    1.13.1 Examiner bias

    1.13.2 Validity and reliability

    1.13.3 Parental involvement according to State and Federal regulations

    1.13.4 Conditions which insure maximum performance on assessment instruments

    1.13.5 Scoring, summarizing and profiling assessment results according to standard procedures

    1.13.6 Privacy

1.14 Describe awareness of differences between identification, assessment, and evaluation procedures and the process of ongoing assessment

1.15 Identify alternative processes for curriculum development by:

    1.15.1 Defining curriculum

    1.15.2 Distinguishing curriculum from instruction

    1.15.3 Identifying major determinants/influences on curriculum planning

1.15.4 Describing alternative models for curriculum development

1.16 Identify different methods of selecting and specifying goals and objectives by:

1.16.1 Identify scope and sequence of skills in the following curriculum areas: math, reading, writing, language development

1.16.2 Demonstrate an understanding of State and commercial curriculum guides and elementary and secondary textbooks

1.17 State advantages and disadvantages of alternative behavior management methods

Professional Skills/Techniques/Methodologies

2.0 The initially certified teacher of students with special needs should be able to:

2.1 Select standardized instruments in terms of validity and reliability in use for educational planning

2.2 Administer, interpret, and utilize results of information collected from standardized instruments

2.3 Develop skills continuum/checklists through task analysis

2.4 Develop criterion-referenced measures based on skills continuum/checklists

2.5 Administer, interpret, and utilize results of information collected from non-standardized instruments

2.6 Utilize a variety of assessment procedures which would include observation, interviews, and anecdotal records

2.7 Demonstrate an understanding of the role of a member of a multidisciplinary evaluation team in the referral process

2.8 Utilize assessment information to assist with the referral process

2.9 Communicate evaluation results in an effective manner with pupils, parents, aides, and other professional

2.10 Utilize assessment information to evaluate the instructional program and be able to:

2.10.1 Determine effectiveness of the instructional program

2.10.2 Modify instructional program based upon evaluation results

2.11 Integrate affective/social skills development and career/vocational development, with academic curriculum

2.12 Develop individualized educational programs for children with special needs by:

  2.12.1 Utilizing assessment of current level of performance in developing instructional goals and objectives

  2.12.2 Developing long and short-range goals for each student

  2.12.3 Writing behavioral objectives: cognitive, affective, psychomotor, career/vocational

  2.12.4 Specifying nature and schedule of evaluation

  2.12.5 Specifying extent of time in regular classes and related special services

  2.12.6 Participating in shared decision-making in Individualized Education Program Committee

2.13 Select and implement instructional strategies by:

  2.13.1 Using task analysis to sequence instruction on social and intellectual skills

  2.13.2 Using principles of learning and development when selecting and implementing instructional strategies

  2.13.3 Designing learning experiences which develop inquiry, decision-making, and problem-solving skills

  2.13.4 Using current research as it applies to curriculum development and instructional strategies

  2.13.5 Developing lesson plans

2.14 Use appropriate instructional materials by:

  2.14.1 Selecting and evaluating commercial materials according to specific criteria

  2.14.2 Developing instructional materials based on student objectives

  2.14.3 Using content levels appropriate to performance levels of students

  2.14.4 Matching instructional activities with objectives of the lesson

2.15 Structure the learning environment by:

  2.15.1 Gaining and maintaining attention of students

  2.15.2 Following lesson plans during instruction but modifying them as necessary

2.15.3 Using individualized activities

2.15.4 Alternating lessons when necessary to provide flexibility of instruction

2.15.5 Using peers and/or teachers as models during instruction

2.15.6 Using the services of a teacher aide

2.15.7 Placing pupils in flexible groups based on intellectual, emotional and social growth, achievement levels and interests

2.15.8 Organizing the classroom for small group and individual instruction

2.15.9 Structuring the physical environment to provide for optimal learning conditions (lighting, seating, barrier-free access, etc.)

2.15.10 Creating an atmosphere which focuses on the strengths of the individual student

2.15.11 Modeling positive attitudes toward learning, toward oneself, teachers, and peers

2.15.12 Enhancing social interaction skills

2.16 Manage individual and group behavior by:

2.16.1 Identifying the nature and sources of behavior problems

2.16.2 Identifying and differentiating among a variety of behavior intervention techniques (i.e., basic counseling, psycho-educational, ecological, behavioral, psychopharmacological, etc.) to improve academic performance and manage individual and group behavior

2.16.3 Selecting behavior management techniques which are appropriate to individual and group needs in a variety of situations

2.16.4 Planning and implementing a systematic program for minimizing behavior problems of a child

2.16.5 Planning appropriate classroom schedules that can accommodate children with various special needs

2.17 Develop procedures for assessing student progress towards academic and social/behavioral goals and objectives by:

2.17.1 Periodically evaluating pupil performance through use of observation, teacher-made or commercially available tests, skill inventories, etc.

2.17.2 Using evaluation results in revising instructional plans for individual students

2.17.3 Developing means for reporting pupil progress to students, parents and other professional

2.18 Develop procedures for assessing instructional program by:

2.18.1 Evaluating particular teaching processes and strategies as related to individual pupil and group performance

2.18.2 Comparing behavior outcomes with the State's goals and objectives in order to evaluate and revise instructional goals, strategies, and materials

2.18 Develop procedures for assessing instructional program by:

2.18.1 Evaluating particular teaching processes and strategies as related to individual pupil group performance

2.18.2 Comparing behavior outcomes with the State's goals and objectives in order to evaluate and revise instructional goals, strategies, and materials

2.19 Communicate effectively with parents, students, aides, school personnel, and other professionals in the community

2.20 Describe procedures for working within the organizational structure of a school to express concerns and solve problems

Professional Attitudes and Values

3.0 The initially certified teacher of special education should be able to:

3.1 Identify the philosophy of a school relative to student management, administrative policies, operational procedures, dress codes, cultural/social values

3.2 Behave in a manner which is consistent with school philosophy

3.3 Demonstrate enthusiasm and interest in teaching students and interacting with other professionals

3.4 Plan for continued professional development

3.5 Recognize the importance of and identify ways to improve one's skills in an ongoing fashion through use of professional literature, attendance at conferences, participation in staff development activities, and related activities

3.6 Identify major professional organizations and resources and analyze their potential contributions to professional growth

3.7 Recognize contributing influences to professional stress and specify strategies for minimizing this phenomenon

3.8 Present one's own professional knowledge, skills, and experiences in an integrated manner to other professionals for specified purposes (job interviews, resumes, supervisory activities, tenure review, etc.)

3.9 Demonstrate ethical practices in professional and personal interactions including protection of confidentiality of information, respect for others, and a sense of discretion with privileged information

Exceptional Children – Computer Competencies (Level II)

4.0 All Exceptional Children teachers should demonstrate an understanding of basic concepts of computer hardware in relation to the education of exceptional children by:

  4.1 Exhibiting a working knowledge of computer technology

  4.2 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval

  4.3 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

  4.4 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

5.0 Exceptional Children teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

  5.1 Identifying, evaluating, and selecting software programs appropriate for Computer Managed Instruction (student enrollment, grades, inventories, purchases, etc.) and Computer Assisted Instruction including Individualized Educational Programs (IEP) development.

  5.2. Knowing how to use specifically designed software programs and how to modify software programs for instructional purposes.

6.0 The Exceptional Children teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as an instructional tool by:

  6.1 Exhibiting an ability to use peripherals such as the voice synthesizer, graphic table, mouse, joystick, modem, printer, etc.

  6.2 Knowing how to interface computers with video recording equipment.

SPECIFIC LEARNING DISABILITIES

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

1.0 The initially certified teacher of specific learning disabilities should be able to:

- 1.1 Identify definitions/classification systems and be able to:
  - 1.1.1 Describe the concept of "normal" vs. learning disabled
  - 1.1.2 Differentiate between learning disadvantaged and emotionally disturbed
- 1.2 Identify prevalence/incidence and be able to:
  - 1.2.1 Discuss prevalence of learning disabilities in school-aged population
- 1.3 Identify etiology and be able to:
  - 1.3.1 Identify the various etiologies of learning disabilities
- 1.4 Identify learning and behavioral characteristics and be able to:
  - 1.4.1 Describe the learning characteristics of the learning disabled
  - 1.4.2 Describe levels of severity as related to learning disabilities
  - 1.4.3 Understand the interrelationship of reading skills development to other content areas, e.g., written and oral language, spelling, listening
  - 1.4.4 Demonstrate an understanding of the history of perceptual motor skills for the child with learning disabilities
  - 1.4.5 Discuss behavioral, linguistic, and cognitive theories of language development
  - 1.4.6 Identify the relationship between academic and social/emotional expectations and classroom behavior problems
- 1.5 Identify attitudes and historical influences and be able to:
  - 1.5.1 List the present and historical attitudes toward treatment/education of learning disabled
- 1.6 Identify legislation/litigation and be able to:
  - 1.6.1 Describe the legislation and litigation issues related to the learning disabled

1.7 Identify continuum of services and be able to:

  1.7.1 Explain the legislation and litigation issues related to the learning disabled

  1.7.2 Explain various roles that learning disability personnel can have

  1.7.3 Explain various instructional arrangements used with LD children

  1.7.4 Identify the educational and vocational continuum services for learning disabled

    1.7.4.1 List educational goals for preschool-aged children

    1.7.4.2 List educational and vocational goals for elementary and secondary school-aged children

1.8 Identify related services

1.9 Identify professional organizations and be able to:

  1.9.1 Know the professional and governmental organizations directly related to the learning disabled

1.10 Identify research and literature and be able to:

  1.10.1 Describe the different theories of teaching spelling

  1.10.2 Describe different conceptual and theoretical approaches to mathematics instruction

Professional Skills/Techniques/Methodologies

2.0 The initially certified teacher of specific learning disabilities should be able to:

  2.1 Demonstrate the ability to assess and diagnose exceptional learners using a variety of informal and formal procedures and be able to:

    2.1.1 Interpret results of intelligence tests administered by other personnel

    2.1.2 Devise tasks which reveal children's skills at problem solving, inferential thinking, and concept development and be able to:

      2.1.2.1 Obtain general and specific information through observation

      2.1.2.2 Select and administer formal and informal diagnostic instruments for those specific skills related to reading

2.1.3 Interpret diagnostic data to specify problems in reading and be able to:

2.1.3.1 Utilize observational techniques such as: automatic recording, analysis of permanent products, observational recording, e.g., anecdotal recording, event recording, time sampling

2.1.4 Develop informal measures of student's written expression ability

2.1.5 Conduct an error analysis from a written sample of a student's work or from the results of student's performance on standardized achievement or spelling tests and be able to:

2.1.5.1 Utilize the procedures for determining a student's verbal problem solving ability

2.1.6 Determine which factors are affecting spelling performance, e.g., motivation, sensory deficit, etc., and be able to:

2.1.6.1 Utilize the procedures for determining a student's conceptual and calculation ability

2.2 Demonstrate the ability to select, design, and/or modify specialized curricula for exceptional learners and be able to:

2.2.1 Describe basic theories related to the field of reading

2.2.2 List the skills related to reading readiness

2.2.3 List the sequence of skills leading to the development of the mature reader

2.2.4 Utilize related reading study skill strategies

2.3 Demonstrate the ability to plan for instruction and be able to:

2.3.1 Identify the skills necessary for reading technical or content specific information

2.3.2 Use formal and informal data to plan for appropriate reading instructional and intervention programs

2.3.3 Plan and implement an individualized reading program for the learning disabled student and be able to:

2.3.3.1 Utilize remedial reading instructional approaches

2.3.4 Plan and implement a basic writing skills program and be able to:

2.3.4.1 Plan and implement a remedial language program which is specifically designed for individualized use and which interrelates all areas of language comprehension and production

2.3.5 Plan and implement a program which teaches manuscript and cursive handwriting skills

2.3.6 Plan and implement a program which teaches the mechanical skills required in written expression, e.g., capitalization, punctuation, spelling, penmanship

2.3.7 Develop specific mathematical skills by organizing and following a planned sequence of activities

2.4 Demonstrate the ability to implement instructional strategies to facilitate learning in exceptional students and be able to:

2.4.1 Incorporate information regarding cognitive development into general instructional programming

2.4.2 Utilize conceptual skills such as: deductive and inductive reasoning, problem solving skills, inferential reasoning, logical thought, categorization, and classification skills

2.4.3 Apply behavior modification programs appropriately

2.4.4 Utilize word recognition skills, including:

2.4.4.1 Context analysis

2.4.4.2 Sight words

2.4.4.3 Phonic analysis

2.4.4.4 Structural analysis

2.4.4.5 Dictionary analysis

2.4.4.6 Specialized vocabulary

2.4.4.7 Utilize various approaches of reading comprehension skills

2.4.5 Utilize traditional and non-traditional ways of teaching algorithms

2.4.6 Teach practical application of math concepts, e.g., liquid measurement as it relates to cooking, linear measurement as it relates to carpentry, time as it relates to the student's daily schedule

2.4.7 Develop an instructional plan for students with learning disabilities who are exhibiting movement difficulty

2.4.8 Develop an instructional program for students exhibiting social interaction problems

2.5 Utilize instructional materials, media, devices, and aids appropriate to the individual needs of exceptional students and be able to:

2.5.1 Use materials, approaches, and techniques that have application to specific types of reading problems

2.5.2 Evaluate, utilize, and/or adapt commercial mathematical programs and materials, e.g., number line counting blocks, cuisenaire rods, to teach a specific skill

2.6 Demonstrate ability to identify and provide appropriate consultation and guidance services to exceptional learners and be able to:

2.6.1 Discuss the unique attitudes, interests and values which affect career/vocational decisions

2.6.2 Discuss how each individual has unique patterns of abilities and limitations which affect career/vocational decisions

2.7 Demonstrate ability to administer and/or supervise program for exceptional learners, including ancillary personnel, paraprofessionals, and volunteers

2.8 Demonstrate ability to evaluate both instructional sequences and overall program effectiveness of school programs serving exceptional learners

Professional Attitudes and Values

3.0 The initially certified teacher of specific learning disabilities should be able to:

3.1 Describe professional organizations directly related to the area of specific learning disabilities and be able to:

3.1.1 Identify and describe national, state or local organizations that focus upon the learning disabled

3.2 Describe process for involvement in professional organizations and be able to:

3.2.1 Develop a plan for participating in the structure and organization of organizations that focus upon learning disabilities education

3.3 Develop a plan for career growth and be able to:

3.3.1 Develop a plan for career growth that includes professional studies and resources for access to and review of empirical professional literature in learning disabilities education and related fields

3.4 Identify specific community resources and linkages relevant to exceptional individuals

3.5 Identify current areas of concern (issues) in area of specific learning disabilities and be able to:

  3.5.1 Awareness of current areas of concern, issues and developments in the learning disabilities field

SPEECH-LANGUAGE IMPAIRED

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

NOTE: A master's degree in speech-language pathology is required for employment in North Carolina Public schools. Some of the competencies may be obtained in a pre-professional speech-language pathology program; however, it is expected that the majority of these professional competencies are to be obtained at the graduate level.

Content and Overall Knowledge

1.0. Identify definitions/classification systems

1.1 Describe speech and language disorders, including:

1.1.1 Language and symbolic disorders

1.1.2 Rhythm and rate disorders

1.1.3 Articulatory disorders

1.1.4 Voice disorders

2.0 Identify prevalence/incidence

3.0 Identify etiology

4.0 Identify learning and behavioral characteristics

4.1 Describe normal speech and language processes and their development, including:

4.1.1 Language and speech development including semantics, syntax, morphology, and phonology

4.1.2 Physiology, anatomy, and neurology of speech and language

4.1.3 Social and cultural aspects of speech and language development

4.1.4 Acoustics and psychoacoustics

4.1.5 Speech and language production and perception

4.1.6 Communicative processes

a. pragmatics
b. pre-verbal
c. verbal
d. co-verbal

5.0 Identify historical influences in exceptional child education

6.0 Identify attitudes affecting educational and health services

7.0 Identify legislation/litigation

    7.1 Describe State and Federal legislation and regulations pertaining to communicatively impaired children

8.0 Identify continuum of services

    8.1 Describe management and organization of speech and language services in the schools

9.0 Identify related services necessary for communicatively impaired children

10.0 Identify professional organizations, State and national, that advocate for exceptional children and youth

11.0 Understand research and literature related to the communicative impaired

Professional Skills/Techniques/Methodologies

The initially certified speech-language specialist should be able to:

12.0 Demonstrate the ability to assess and diagnose exceptional learners using a variety of informal and formal procedures

    12.1 Use identification and diagnostic skills and procedures necessary for the identification and diagnosis of communicative disorders, deviations and developmental needs for:

        12.1.1 Language disorders. Skills to use standardized and informal language tests in the areas of syntax, semantics, and phonology with children and youth

        12.1.2 Speech disorders. Skills to use standards and informal speech tests for identification and diagnosis of such disorders as voice, stuttering neuropathologies, articulation disorders, and the like

        12.1.3 Hearing. Skills to conduct hearing, screening, and threshold tests

13.0 Demonstrate the ability to select, design and/or modify specialized curricula for communicatively impaired children and youth

14.0 Demonstrate the ability to plan intervention approaches

    14.1 Use treatment and management procedures appropriate to habilitation, rehabilitation, and instruction programs for persons requiring speech and/or language services

15.0 Demonstrate the ability to implement instructional strategies to facilitate learning in communicatively impaired children and youth

  15.1 Carry out appropriate treatment procedures

  15.2 Prepare periodic and final case reports and maintain records of the speech and language program with respect to evaluations, treatment, and outcomes

16.0 Use instructional materials, media, devices, and aids appropriate to the individual needs of communicatively handicapped children and youth

17.0 Demonstrate ability to identify and provide appropriate consultation and guidance services to exceptional learners, parents, and significant others

  17.1 Provide consultative services for classroom teachers and other school personnel regarding speech and language disorders

18.0 Demonstrate ability to administer and/or supervise programs for exceptional learners, including ancillary personnel, paraprofessionals, and volunteers

19.0 Demonstrate ability to evaluate both instructional sequences and overall program effectiveness of school programs serving exceptional learners

  19.1 Evaluate outcomes of treatment procedures

  19.2 Utilize research reports for modifying clinical-educational approaches

  19.3 Carry out clinical-educational research related to the implementation of appropriate services, such as scheduling approaches

20.0 Demonstrate skills in program planning, development, management, and evaluation related to communicative disorders, deviations, and development

21.0 Demonstrate skills in interdisciplinary team efforts to determine the individualized educational program needs of children and youth

Professional Attitudes and Values

22.0 Describe professional organizations directly related to the area of speech and language impaired

23.0 Develop cooperative efforts with other professional support personnel and parents to meet a child's needs including being effective in interdisciplinary team functioning in identification, diagnosis and treatment of persons with communicative disorders

24.0 Describe process for involvement in professional organizations

25.0 Develop a plan for career growth

26.0 Identify specific community resources and linkages relevant to exceptional individuals

27.0 Identify current areas of concern (issues) in areas of speech and language impaired

MENTALLY HANDICAPPED

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

Content and Overall Knowledge

1.0 Explain the present and historical definitions and classification systems in the area of mental retardation

    1.1 Define and discuss medical definitions and classifications

    1.2 Define and discuss psychometric definitions and classifications

    1.3 Define and discuss education definitions and classifications

    1.4 Define and discuss current AAMD, sociological, and North Carolina definitions

2.0 Identify prevalence/incidents of mildly retarded; moderately retarded; severely/profoundly retarded

3.0 Identify etiology

    3.1 Describe biomedical factors

    3.2 Describe psychosocial factors

    3.3 Explain the issue of cultural-familiar retardation

4.0 Identify the social, learning, and behavior characteristics of the retarded; the moderately mentally retarded; the severely mentally retarded; and the profoundly mentally retarded

5.0 Identify attitudes and historical influences

    5.1 Compare historical and present attitudes toward treatment/habilitation of the retarded and origins of special education and be able to:

        5.1.1 Describe the history of institutionalization of the retarded

        5.1.2 Explain the history of special class placement

        5.1.3 Explain history of deinstitutionalization and the concept of normalization

        5.1.4 Identify residential alternatives to the institutionalization of retarded persons

        5.1.5 Explain the history of mainstreaming

6.0 Identify legislation and litigation issues and cases related to the retarded

7.0 Identify continuum of services

- 7.1 Discuss the continuum of services and related goals for the mentally retarded

8.0 Identify related services

9.0 Identify professional organizations

- 9.1 Describe professional and governmental organizations concerned with the needs and rights of the retarded and be able to:
  - 9.1.1 Describe CEC, ARC, AAMD, and other recognized professional organizations
  - 9.1.2 Describe state agencies including Department of Public Instruction, Department of Human Resources, and Department of Correction as they relate to the retarded

10.0 Identify research and literature

Professional Skills/Techniques/Methodologies

11.0 Demonstrate the ability to assess and diagnose exceptional learners using a variety of informal and formal procedures

- 11.1 Discuss intelligence testing and issues of intelligence testing in mental retardation
- 11.2 Describe formal and informal assessment procedures and the rationale for use of specific procedures with mentally handicapped students
- 11.3 Demonstrate the assessment of oral language skills in the mentally retarded
- 11.4 Demonstrate the assessment of reading skills in the mentally retarded
- 11.5 Demonstrate the assessment of mathematics skills in the mentally retarded
- 11.6 Demonstrate the assessment of social skills in the mentally retarded
- 11.7 Demonstrate the assessment of writing skills in the mentally retarded
- 11.8 Demonstrate the assessment of vocational skills in the mentally retarded

12.0 Demonstrate the ability to select, design, and/or modify specialized curricula for exceptional learners

13.0 Demonstrate the ability to plan for instruction

- 13.1 Describe academic goals for the mentally retarded (pre-school to adulthood)

13.2 Describe career/vocational goals for the mentally retarded (pre-school to adulthood)

13.3 Describe leisure time/recreational goals for mentally handicapped (pre-school to adulthood)

13.4 Describe socialization goals for mentally handicapped (pre-school to adulthood)

14.0 Demonstrate the ability to implement instructional strategies to facilitate learning in exceptional children

14.1 Demonstrate oral language training with the mentally retarded and be able to:

14.1.1 Select appropriate commercially available development materials and programs

14.1.2 Plan and implement a remedial language program which interrelates all areas of language comprehension and production

14.1.3 Modify commercial materials and programs for the mentally retarded

14.2 Demonstrate remedial reading instruction and be able to:

14.2.1 Differentiate developmental, remedial, functional reading

14.2.2 Demonstrate the teaching of word recognition skills; comprehension skills

14.3 Demonstrate approaches in spelling and handwriting and be able to:

14.3.1 Discuss different conceptual and theoretical approaches to spelling instruction

14.4 Demonstrate remedial mathematics instruction and be able to:

14.4.1 Differentiate developmental, remedial, and functional mathematics, following a planned sequence of activities

14.4.2 Teach a specific mathematical skill by developing and following a planned sequence of activities

14.4.3 Evaluate, utilize, and/or adapt commercial mathematical programs and materials

14.4.4 Use appropriately and effectively a variety of manipulative mathematical materials, e.g., number line, counting blocks, cuisenare rods, to teach a specific skill

14.4.5 Discuss different conceptual and theoretical approaches to mathematics instruction

14.4.6 Describe non-traditional ways of teaching algorithms

14.4.7 Demonstrate practical application of math concepts, e.g., liquid measurement as it relates to cooking, linear measurement as it relates to carpentry, time as it relates to the student's daily schedule

14.5 Demonstrate the teaching of vocational skills and be able to:

14.5.1 Provide information pertaining to a variety of career opportunities

14.5.2 Provide opportunities for students to make on-site observations of various occupations

14.5.3 Relate career/vocational instruction to child's physical mental, social, and scholastic level of development

14.5.4 Encourage group exploration and discussion of various career/vocational opportunities

14.5.5 Counsel individuals to help them make realistic vocational decisions based on their abilities and interests

14.5.6 Describe the specific skills necessary for career entry, e.g., typing, filing

14.5.7 Teach practical job securing skills when necessary, e.g., interview behavior, completion of job application form

14.5.8 Teach self-help skills which affect employment opportunities, e.g., grooming, appropriate dress, use of handkerchief instead of sleeves

14.5.9 Teach daily living skills which affect career decisions, e.g., budgeting of money, best use of time, importance of rest and nutrition

14.5.10 Teach family management skills, e.g, family planning and child rearing, food selection and preparation, purchasing decisions

14.5.11 Provide opportunities to practice cooperative interaction with others in simulated or real work situations

14.5.12 Provide opportunities for the development of effective leadership skills

14.5.13 Relate successful employment to acceptance of responsibility for own behavior

14.5.14 Relate successful employment to feelings of personal satisfaction about accomplishments

14.5.15 Help students develop the skills needed to pass the General Education Development Test

15.0 Utilize instructional materials, media, devices, and aids appropriate to the individual needs of exceptional students

16.0 Demonstrate ability to identify and provide appropriate consultation and guidance services to exceptional learners, parents, and significant others

17.0 Demonstrate ability to administer and/or supervise programs for exceptional learners, including ancillary personnel, paraprofessionals, and volunteers

18.0 Demonstrate ability to evaluate both instructional sequences and overall programs serving exceptional learners

Professional Attitudes and Values

19.0 Describe professional organizations directly related to the area of mentally handicapped

20.0 Describe the process for involvement in professional organizations

21.0 Develop a plan for career growth

22.0 Identify specific community resources and linkages relevant to mentally handicapped individuals

23.0 Identify current areas of concern (issues) in the area of mentally handicapped

BEHAVIORALLY/EMOTIONALLY HANDICAPPED

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

Content and Overall Knowledge

1.0 Identify the definitions and classification systems in emotionally handicapped and factors contributing to their development

2.0 Identify the prevalence and/or incidences of emotional handicaps as well as influencing factors that contribute to these rates

3.0 Identify the etiology of emotional handicaps according to theoretical views of variance

4.0 Identify the social, behavioral, emotional, and learning characteristics of emotionally handicapped children and youth as they relate to educational practice

5.0 Identify basic approaches, processes, and procedures for screening, evaluation, and diagnosis of emotionally handicapped children and youth

6.0 Demonstrate knowledge of primary professional roles and service delivery systems in the identification and diagnosis of emotionally handicapped children and youth

7.0 Define the concept of a continuum of educational services as it applies to emotionally handicapped children and youth

8.0 Identify curriculum and instructional procedures for serving emotionally handicapped children and youth in educational and related settings

9.0 Describe in educationally relevant terms basic models for education and related services according to major theoretical views of variance

10.0 Demonstrate a knowledge of ability to utilize services of private and public agencies and organizations to maximize the benefit from education for emotionally handicapped children and youth

11.0 Identify professional, consumer, and governmental organizations (local, state, and national) directly related to services for emotionally handicapped children and youth

Professional Skills/Techniques/Methodologies

12.0 Demonstrate the ability to assess emotionally handicapped learner's strengths, weaknesses, styles, and interpersonal relations using a variety of informal and formal procedures

13.0 Demonstrate ability to use results of psychological, medical, or other diagnostic tools in instructional planning and behavior management

14.0 Demonstrate the ability to select, design, and/or modify special curricula to meet the cognitive, affective, and behavioral needs of the emotionally handicapped learner

15.0 Demonstrate skills in planning and developing classroom organization and environment conducive to learning

16.0 Demonstrate the ability to implement instructional strategies to facilitate learning in emotionally handicapped students

17.0 Demonstrate an ability to select and employ positive group and individual intervention techniques to manage school or classroom behavior effectively

18.0 Utilize instructional materials, media, devices, and aids appropriate to the individual needs of exceptional students

19.0 Demonstrate ability to identify and provide appropriate counseling and guidance services to emotionally handicapped learners, parents, school administrators, regular educators, and support services

20.0 Demonstrate ability to administer and/or supervise programs for emotionally handicapped learners, including ancillary personnel, paraprofessionals, and volunteers

21.0 Demonstrate ability to evaluate both instructional sequences and overall program effectiveness of school programs serving educational learners

22.0 Demonstrate the ability to use a variety of crisis management techniques to control negative behavior and redirect students to appropriate behavior

Professional Attitudes and Values

23.0 Describe processes for professional involvement in consumer, professional, and governmental organizations concerned with emotionally handicapped students

24.0 Identify specific community resources and linkages relevant to the education of emotionally handicapped children and youth

25.0 Demonstrate an ability to interact professionally with other professional disciplines involved in the treatment and education of emotionally handicapped children and youth

26.0 Demonstrate an ability to interact with students, parents, and other educators in a professional, caring manner

27.0 Identify and discuss current professional issues in the education of emotionally handicapped children and youth

28.0 State and defend a personal perspective toward approaches and strategies for serving emotionally handicapped children and youth

29.0 Develop an individual plan for continuing professional development and career growth

PHYSICALLY/ORTHOPEDICALLY HANDICAPPED

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

NOTE: Teacher certification in the area of physically/orthopedically handicapped must be obtained by completing the requirements for adding an endorsement to an existing area of special education certification. The competencies required for endorsement should be able to be completed within 6-9 semester hours of study.

Content and Overall Knowledge

1.0 Identify the following anatomical systems and describe their basic function:

  1.1 skeletal system

  1.2 muscular system

  1.3 nervous system

  1.4 circulatory system

  1.5 respiratory system

  1.6 digestive system

2.0 Describe normal growth and development of a child and identify milestones in the following areas:

  2.1 motor

  2.2 cognitive

  2.3 social/language

  2.4 affective

3.0 Describe basic etiology, prevalence, and characteristics of common physical disabilities

  3.1 cerebral palsy

  3.2 spina bifida

  3.3 muscular dystrophy

4.0 Recognize ambivalent and insecure feelings of teachers in interacting with the physically handicapped

5.0 Describe the key Federal and State legislation/litigation related to physically handicapped

6.0 Identify key professional and governmental organizations related to the physically handicapped in an educational setting

7.0 Identify key professionals and their roles with the physically handicapped in an educational setting

8.0 Locate and review current research and literature related to the physically handicapped

9.0 Recognize the common environmental barriers that prevent accessibility for the physically handicapped

Professional Skills/Techniques/Methodologies

10.0 Demonstrate the ability to appropriately request assistance from support personnel with assessment and program planning for physically handicapped students

11.0 Utilize academic skill sequence to meet the needs of the physically handicapped, including the incorporation of appropriate therapeutic management

12.0 Utilize instructional materials, devices, and aids appropriate to the individual needs of physically handicapped students

13.0 Illustrate the ability to modify the educational environment to accommodate physical, psychoemotional, and therapeutic needs

14.0 Investigate methods which facilitate a positive educational experience for the physically handicapped

    14.1 school related

    14.2 family related

    14.3 community related

15.0 Analyze the appropriateness of instructional goals from a developmental viewpoint:

    15.1 cognitive areas

    15.2 motor areas

    15.3 affective areas

16.0 Analyze the appropriateness of methods for achieving instructional goals from a developmental viewpoint

    16.1 cognitive areas

    16.2 motor areas

    16.3 affective areas

17.0 Demonstrate the ability to coordinate an instructional program with vocational/career goals for the physically handicapped student

Professional Attitudes and Values

18.0 Describe professional organizations directly related to the area of physically/orthopedically impaired

  18.1 Identify and describe national, State, or local organizations that focus upon the physically/orthopedically impaired

19.0 Describe process for involvement in professional organizations

  19.1 Develop a plan for participating in the structure and organization of organizations that focus upon physically/orthopedically impaired education

20.0 Develop a plan for career growth

  20.1 Develop a plan for career growth that includes professional studies and resources for access to and review of empirical professional literature in physically/orthopedically impaired education and related fields

21.0 Identify specific community resources and linkages relevant to exceptional individuals

22.0 Identify current areas of concern (issues) in areas of physical/orthopedic impairment

SEVERELY/PROFOUNDLY HANDICAPPED

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

Content and Overall Knowledge

1.0 Identify definitions/classification systems

  1.1 Trace the present and historical definitions and classification systems for the severely and profoundly handicapped

  1.2 Identify prevalence/incidence

  1.3 Identify etiology

  1.4 Identify learning and behavioral characteristics and be able to:

    1.4.1 List the general characteristics of cerebral palsy, mylemenigocele, scoliosis, muscular dystrophy, severe emotional disturbance, autism, and severe and profound mental retardation

    1.4.2 Describe movement patterns, postures, and problems which are manifested by individuals with severe or profound physical handicaps

    1.4.3 Identify and describe normal and abnormal reflexes

2.0 Identify historical influences

3.0 Identify attitudes

  3.1 Trace the origin and development of the principles of normalization

4.0 Identify legislation/litigation

  4.1 Identify the key legislation and litigation related to the severely and profoundly handicapped

5.0 Identify continuum of services

  5.1 Describe the educational, social, and vocational continuum of services for the severely and profoundly handicapped

  5.2 Describe a human management model for severely and profoundly handicapped individuals that maximizes the application of the principle of normalization

6.0 Identify related services

7.0 Identify professional organizations

    7.1 List the professional and governmental organizations directly related to severely and profoundly handicapped individuals

8.0 Identify research and literature

9.0 Identify procedures and tests utilized in screening infants for severely or profoundly handicapping conditions

    9.1 Compare and contrast the value of elicited assessment, observational assessment, and interview assessment

    9.2 Describe how to pinpoint entry and exit level skills through task analytic assessment

    9.3 Describe how to collect frequency or rate data of discrete behaviors

    9.4 Describe how to collect time sampling data through interval recording

    9.5 Identify the advantages and disadvantages of continuous vs. probe data

    9.6 Discuss the use of data as a program decision tool for monitoring and evaluating child progress

10.0 Discuss the concept and the procedures necessary to do an effective child-find

    10.1 Describe how tenets of discrimination learning may be applied to acquisition of skills

11.0 Define and compare instructional program evaluation designs

    11.1 Identify the components of instructional programs included in and missing from existing language programs designed for individuals with severe or profound impairment

    11.2 Describe the basic program development sequence and rationale involved in systematic instruction

12.0 Discuss the implications of task analysis in the assessment, instruction, and evaluative components of systematic instruction

    12.1 Discuss the general sequence of social development in the normal child from birth to age three

13.0 Describe how tenets of reinforcement theory can strengthen and maintain new behavior

    13.1 Identify and describe the functional use of prosthetic devices in the areas of positioning, transfer, travel, mobility, self-help, and recreation

14.0 Describe how behavior shaping techniques can be used to develop new behavior

- 14.1 Identify safety techniques concerning wheel chairs and management of individuals with ambulation problems

15.0 Describe how to program for retention and transfer of training

- 15.1 Identify environmental modifications promoting accessibility and usability of buildings and facilities by severely and profoundly handicapped individuals

16.0 Demonstrate a knowledge of how to incorporate therapeutic techniques into an educational program

- 16.1 Discuss the sequence of communication acquisition in normally developing children

Professional Skills/Techniques/Methodologies

17.0 Demonstrate the ability to assess and diagnose exceptional learners using a variety of informal and formal procedures

18.0 Demonstrate the ability to select, design and/or modify specialized curricula for exceptional learners

- 18.1 Design instructional programs to teach skills to individuals with severe or profound handicaps
- 18.2 Design instructional programs to teach concepts to individuals with severe or profound handicaps
- 18.3 Design a sequential curriculum which will provide educational opportunities leading to increasing degrees of independent functioning across all domains
- 18.4 Demonstrate the methods successfully used to train developmental, recreational, and vocational motor skills for severely and profoundly handicapped individuals
- 18.5 Develop a vocational training program for severely and profoundly handicapped persons

19.0 Demonstrate the ability to plan for instruction

- 19.1 List recommendations to improve an individual's general positioning for classroom activity
- 19.2 Utilize and/or adapt skill sequences to meet the needs of physically handicapped individuals

20.0 Demonstrate the ability to implement instructional strategies to facilitate learning in exceptional students

- 20.1 Demonstrate the basic instructional continuum of instructions, modeling, and physical guidance

20.2 Utilize proper body mechanics involved in handling and positioning

20.3 Demonstrate techniques for inhibiting abnormal reflexes and facilitating normal reflexes

20.4 Design instructional strategies for training receptive and expressive language with severely and profoundly handicapped individuals

20.5 Design instructional strategies for training non-vocal communication with severely and profoundly handicapped individuals

20.6 Design developmental and age-appropriate gross and fine motor intervention activities

20.7 Demonstrate the ability to program a variety of techniques utilized in training daily living skills (i.e., toilet training, feeding, dressing, personal hygiene, and grooming) and be able to:

20.7.1 Demonstrate the methods successfully used to teach socialization skills to severely and profoundly handicapped individuals

20.8 Demonstrate the ability to analyze learning and production problems typically encountered in severely and profoundly handicapped workers

21.0 Utilize instructional materials, media, devices, and aids appropriate to the individual needs of exceptional students

21.1 Demonstrate the ability to locate, select, adapt, and evaluate instructional materials for all curricular domains

22.0 Demonstrate ability to identify and provide appropriate consultation and guidance services to exceptional learners, parents, and significant others

23.0 Demonstrate ability to administer and/or supervise programs for exceptional learners, including ancillary personnel, paraprofessionals, and volunteers

24.0 Demonstrate ability to evaluate both instructional sequences and overall program effectiveness of school programs serving exceptional learners

24.1 Develop evaluation procedures for overall programming for severely handicapped students

24.2 Assess severely or profoundly handicapped students and plan intervention programs based on that assessment

24.3 Demonstrate the ability to task-analyze across different curricula domains

25.0 Identify and implement the basic steps involved in the management of behavioral deficits and excesses

Professional Attitudes and Values

26.0 Describe professional organizations directly related to the areas of severe/ profoundly handicapped

27.0 Describe process for involvement in professional organizations

28.0 Develop a plan for career growth

29.0 Identify specific community resources and linkages relevant to exceptional individuals

30.0 Identify current concerns/issues in area of severe/profoundly handicapped

CROSS-CATEGORICAL

The competencies listed below are minimum competencies necessary for initial teacher certification in the specified areas of specialization.

Content and Overall Knowledge

1.0 Articulate the rationale and role differences for cross-categorical programming

Professional Skills/Techniques/Methodologies

2.0 Demonstrate the ability to assess and diagnose exceptional learners using a variety of informal and formal procedures

  2.1 Interpret results of intelligence and other appropriate tests administered by other personnel

  2.2 Interpret diagnostic data to specific problems in reading, math and communication skills and be able to:

    2.2.1 Utilize observational techniques such as: automatic recording, analysis of permanent products, observational recording, (e.g., anecdotal recording, event recording, time sampling)

  2.3 Devise tasks which reveal a student's skills at problem solving, inferential thinking, and concept development

  2.4 Develop informal measures in areas of reading, math, and communication skills

3.0 Demonstrate the ability to plan for instruction

  3.1 Use formal and informal data to plan for appropriate instruction and intervention programs

  3.2 Plan and implement individualized education programs for mild/moderate students to include MR, LD, ED, physical, and sensory impairments

4.0 Demonstrate the ability to implement instructional strategies to facilitate learning in exceptional students

  4.1 Incorporate information regarding cognitive development into general instructional programming in the areas of:

    4.1.1 Cognitive skills

    4.1.2 Affective skills

    4.1.3 Psychomotor skills

    4.1.4 Career/vocational skills

  - 4.2 Utilize conceptual skills such as deductive and inductive reasoning, problem-solving skills, inferential reasoning, logical thought, categorization and classification skills

  - 4.3 Apply behavior management modification programs

5.0 Utilize instructional materials, media, devices, and aids appropriate to the individual needs of exceptional students

  - 5.1 Use materials, approaches, and techniques that have application to specific types of reading problems

  - 5.2 Evaluate, utilize and/or adapt commercial programs and materials

6.0 Demonstrate the ability to identify and provide appropriate consultation and guidance services to exceptional learners

  - 6.1 Discuss how each individual has unique patterns of ability and limitations which affect career/vocational decisions

  - 6.2 Discuss the unique attitudes, interests and values which affect career/vocational decisions

7.0 Demonstrate ability to administer and/or supervise programs for exceptional learners including ancillary personnel, paraprofessionals, and volunteers

8.0 Demonstrate ability to evaluate both instructional sequences and overall program effectiveness of school programs serving exceptional learners

9.0 Demonstrate the ability to effectively consult with peer professionals

  - 9.1 Communicate to peer professionals, by direct contact, the classroom modifications necessary for students with mild/ moderate handicaps

  - 9.2 Provide support to peer professionals via techniques and materials in assisting them to work with mildly/moderately handicapped students

10.0 Demonstrate effective writing skills necessary to assist teachers through written recommendations and suggestions

11.0 Demonstrate appropriate affective-social skills necessary to promote and enhance personal and program effectiveness with children, parents, teachers, and other school personnel

Professional Attitudes and Values

12.0 Describe professional organizations directly related to the education of exceptional children

13.0 Describe process for involvement in professional organizations

14.0 Develop a plan for career growth that includes professional studies and resources for access to and review of empirical professional literature

15.0 Identify specific community resources and linkages relevant to exceptional individuals

16.0 Identify current areas of concerns, issues and developments in the education of the mild/moderately handicapped

ACADEMICALLY GIFTED

The guidelines and competencies delineated in this section for the area of academically gifted are intended for use in planning, implementing, and approving teacher education programs leading to North Carolina teacher add-on certification in academically gifted at the Bachelor's (A) and Master's (G) levels. These guidelines and competencies complement Council for Exceptional Children (CEC) and National Council for Accreditation of Teacher Education (NCATE) program standards and should be used when seeking program approval from these organizations. The program guidelines are designed to be suggestive and directional rather than prescriptive to permit flexibility and diversity in colleges, universities, and personnel preparation programs. The competencies provided are derived from a conceptualization of the role of a teacher of persons who are academically gifted. The competencies reflect a teacher who is prepared to work with academically gifted students in grades K-12.

The program of preparation of a prospective teacher of students who are academically gifted is based on the recognition that the individual is preparing to assume the roles and responsibilities of a professional educator. To become a professional educator the prospective teacher should be challenged intellectually by a professional educational program. To provide a program in which the person may achieve high standards of performance, a teacher should (1) be liberally educated, (2) understand students' needs and how they learn, (3) have competence in the area of specialization, (4) possess qualities needed to work effectively with students, their families, and with other professionals with whom they come in contact, and (5) have a disposition for continued learning as a practicing professional. Therefore, teacher preparation programs should be designed to provide for both the common academic and professional needs of all teachers. These professional needs are addressed through program components in general education, professional education, and education of academically gifted students.

Guidelines and competencies for programs leading to add-on teacher certification are included in the following section.

ACADEMICALLY GIFTED ADD-ON CERTIFICATION GUIDELINES AND COMPETENCIES

Academically gifted certification will constitute 12 semester hours of graduate study and includes the prerequisite of certification in an academic content area or grade level. The program should be planned in accordance with the following guidelines.

GUIDELINE 1: The program provides broad knowledge in the nature of intelligence and the needs of gifted students.

Preparation in this area involves knowledge of the definitions of giftedness; the characteristics of gifted students; theories of psychological, cognitive, affective, and psychosocial development as they relate to giftedness; a comparative study of theories of intelligence and creativity.

GUIDELINE 2: The program provides a broad knowledge of theories of learning, creativity, and curriculum differentiation.

Preparation in this area involves knowledge of a variety of theoretical models, including cognitive and affective domains, creative problem solving, creativity, critical thinking, and learning styles/teaching styles. Application to the content, the teaching/learning process or the product in a subject area or grade level will demonstrate an understanding of curriculum differentiation.

GUIDELINE 3: The program provides broad knowledge of program design, service delivery, and program evaluation.

Preparation in this area includes the elements of program design and service delivery through a knowledge of a continuum of services that match services to student identification, rules and regulations that govern programs for gifted students, and the development and use of program evaluation models.

GUIDELINE 4: The program develops awareness of the need for continuing education, research, and professional growth activities.

Preparation in this area includes a knowledge of historical and contemporary issues related to the development of gifted education in North Carolina, the nation and the world; state and national professional organizations that act as advocates for education of gifted students; and local, State and national resources for gifted children and their parents.

ADD-ON COMPETENCIES NEEDED BY TEACHERS OF ACADEMICALLY GIFTED STUDENTS

Teachers of the academically gifted must hold certification in a content area or teaching field and, in addition, must possess the competencies to serve such students. The competencies listed below are minimum competencies required for all teachers of academically gifted students.

The entry level teacher of academically gifted will:

Content and Overall Knowledge

1.0 Provide a rationale for services for the gifted

    1.1 Trace historical definitions of giftedness

    1.2 Contrast international, national and North Carolina definitions of giftedness and procedures for identifying gifted students

    1.3 Describe and compare theories of the nature of intelligence

    1.4 Contrast and compare different theories of the nature of creativity

    1.5 Interpret and apply the findings of research investigations in the relationship between creativity, intelligence, and other factors significant to giftedness

    1.6 Relate the theories of psychosocial, cognitive, and affective development to the identification of general characteristics of the gifted

    1.7 Identify characteristics of special populations of giftedness

1.8 Identify vertical and horizontal continua of services

1.9 Identify related services that affect the overall educational program of a gifted student

1.10 Identify and describe local, State, national, and international organizations that focus on gifted education

1.11 Identify professional literature in the field of gifted education

Specific Skills/Techniques/Methodologies

2.0 Demonstrate the ability to assess gifted students using a variety of informal and formal procedures

2.1 Critique assessment instruments used to identify gifted students

2.2 Describe and critique procedures for system-wide screening and evaluation of the gifted

2.3 Describe and critique the North Carolina identification criteria

2.4 Compare and contrast alternative instructional models

2.5 Demonstrate mastery of instructional models by integrating academic content into various models

2.6 Demonstrate the ability to use the North Carolina Standard Course of Study in differentiated units of instruction

2.7 Develop units of instruction which demonstrate differentiated curriculum

2.8 Describe and demonstrate teaching strategies for affective, cognitive, and psychosocial domains

2.9 Describe and demonstrate teaching strategies designed to match learning styles of gifted students

2.10 Demonstrate methods to stimulate creative and original expression

2.11 Evaluate and adapt commercial, teacher-made, and general educational materials for use with gifted students

2.12 Demonstrate the ability to write and implement Individual Education Programs and Group Education Programs

2.13 Identify, evaluate, and create program designs appropriate to school systems with special demographic characteristics

2.14 Identify, contrast, and evaluate appropriate service delivery practices with regard to school settings

2.15 Identify, contrast, and evaluate appropriate grouping practices with regard to school settings

2.16 Demonstrate ability to evaluate instructional programs' effectiveness for gifted students

2.17 Demonstrate knowledge of Level II computer competencies

2.18 Demonstrate skills in the use of appropriate technologies that enhance student learning

Attitudes and Standards

3.0 Identify and describe resources and organizations that serve gifted students and their families and professionals in the field of gifted education

3.1 Demonstrate effective communication skills in consulting and collaborating with educational professionals, parents, and the community at large

Revised 8/91

VISUALLY IMPAIRED

The guidelines and competencies delineated in this section for the area of Visual Impairments are intended for use in planning, implementing, and approving teacher education programs leading to North Carolina teacher certification in Visually Impaired at the Bachelor's (A) and Masters (G) levels. These guidelines and competencies complement Council for Exceptional Children and National Council for Accreditation of Teacher Education (NCATE) program standards and should be used when seeking program approval from these organizations. The program guidelines are designed to be suggestive and directional rather than prescriptive to permit flexibility and diversity in colleges and universities. The competencies provided are derived from a conceptualization of the role of a teacher of persons who are visually impaired. The competencies reflect a teacher who is prepared to work with students between the ages of 5 and 21 and ranging from visionally limited, to low vision, to blind. Guidelines and competencies are not provided for sixth year (AG) and doctoral (DG) levels of certification in visually impaired.

The program of preparation at the Bachelor's (A) certification level of a prospective teacher of persons who are visually impaired is based on the recognition that the individual is preparing to assume the roles and responsibilities of a professional educator. To become a professional educator the prospective teacher should be challenged intellectually by a rigorous program of education and training. To provide a program in which the person may achieve high standards of performance, a teacher should (1) be liberally educated, (2) understand students' needs and how they learn, (3) have competence in the area of specialization, (4) possess qualities needed to work effectively with students their families, and with other professionals with whom they come in contact, and (5) have a disposition for continued learning as a practicing professional. Therefore teacher preparation programs at the bachelor's level in visually impaired should be designed to provide for both the common academic and professional needs of all teachers, teachers of children with various exceptionalities, and the specialized needs of those preparing to teach persons with visual impairments. These professional needs are addressed through program components in general education, professional education, education of exceptional children, and education of persons with visual impairments.

Programs leading to Master's (G) certification should enable teachers to acquire a depth of understanding of the field of visually impaired and the ability to serve as an agent for educational change beyond that which is expected of teachers at the Bachelors certification level. Programs beyond the Bachelor's levels should require extensive reading and independent study, encourage students to think independently, and provide opportunities for research. In order for teachers to obtain a depth of understanding of the field of visual impairments, it is necessary that they demonstrate the competencies required for Bachelor's certification as well as meeting those at the Masters level. Components of Master's certification programs (G) should include an indepth study in social and behavioral sciences, exceptional children, visual impairments, research, and leadership skills. Opportunities to demonstrate advanced skills including research should be provided throughout the program.

Guidelines and competencies for programs leading to Bachelor's level teacher certification are included in the following section.

VISUALLY IMPAIRED
BACHELOR'S (A) CERTIFICATION GUIDELINES AND COMPETENCIES

GUIDELINE 1: There should be a program of general studies to assure that teachers in the field of visually impaired education are literate, broadly educated, and cultured persons.

The general studies requirements for teachers in the field of visual impairments are the same as those for all undergraduate teacher education programs. This guideline may be addressed by requiring students to satisfactorily complete a general studies sequence that has been approved by the National Council for Accreditation of Teacher Education (NCATE).

GUIDELINE 2: There should be a professional studies component that provides teachers in the field of visually impaired education with a core of knowledge, research, theory, and application in social and behavioral sciences, human growth and development, and teaching and learning theory.

Teachers prepared to teach in the field of visual impairments should demonstrate the generic professional studies competencies cited previously for all teacher education programs.

GUIDELINE 3: The program should provide for a core of content and knowledge, professional skills and methods, and professional attitudes and values regarding the educational needs of exceptional children.

The Core Competencies (CO-A) are appropriate for all teacher preparation programs at the Bachelor's certification level in the education of exceptional children. These competencies are divided into three sections--Content and Knowledge, Techniques of Teaching, and Professional Attitudes and Values.

BACHELOR'S (A) CERTIFICATION COMPETENCIES

The entry level teacher of the visually impaired will:

1.0 Have the knowledge to define and classify visual acuities according to standard definitions, including:
    1.1 the national/State definition for legally blind;
    1.2 the national/State definition for low vision; and
    1.3 the national/State definition for functionally blind.

2.0 Be able to explain the trends in education for the visually impaired since P.L. 94-142 and 99-457, including:
    2.1 the acceptance of handicapped visually impaired students in neighborhood schools; and
    2.2 the incidence of multihandicapped visually impaired school-aged students within the public day schools.

3.0 Demonstrate a knowledge of:
    3.1 the most prevalent ocular pathologies as reflected in current professional literature; and
    3.2 other impairments which may impact on the educational experiences of visually impaired children.

4.0 Identify and understand the function of the major anatomical parts of the eye

5.0 Explain the educational implications of the most prevalent ocular pathologies, both congenital and adventitious in acquisition, as related to curricular adaptations and teaching approaches in the North Carolina Standard Course of Study

6.0 Demonstrate the following principles in orientation and mobility, including but not limited to:
  6.1 pre-cane techniques
    - sighted guide use
    - protective techniques
    - trailing
    - squaring off;
  6.2 directionality;
  6.3 two-point cane techniques; and
  6.4 environmental orientation.

7.0 Define a continuum of services available for visually impaired students including but not limited to:
  7.1 self-contained settings;
  7.2 resource settings;
  7.3 mainstreamed settings with consultation to classroom teachers; and
  7.4 residential programs for students with visual impairments.

8.0 Demonstrate an awareness of private, public, and governmental agencies that provide services for visually impaired persons

9.0 Demonstrate an awareness of current research and its implications for visually impaired students, as reflected in professional journals and literature

10.0 Demonstrate an awareness of the implications of testing for students with visual impairments particularly as related to:
  10.1 the lack of representation of this population in the norming process; and
  10.2 the effect of test modifications on test interpretation.

11.0 Demonstrate the ability to use formal and informal diagnostic evaluations to assess visual skills for low vision students and tactile skills for blind students, including
  11.1 administration of assessment techniques;
  11.2 interpretation of the result of an eye report prepared by an ophthalmologist or optometrist;
  11.3 displaying an awareness of the nature of functional vision;
  11.4 writing in measurable terms appropriate long-term educational goals and short-term instructional objectives for an individualized educational plan;
  11.5 demonstration of the ability to modify instructional strategies and utilize adapted materials to accommodate the needs of visually impaired/low vision children; and
  11.6 demonstration of ability in methods and materials in teaching Braille.

12.0 Demonstrate the use of conventional devices specifically designed for use by visually impaired persons including, but not limited to:

12.1 braille writer;
12.2 slate and stylus;
12.3 abacus; and
12.4 other technological devices

13.0 Demonstrate an awareness of Federal and State guidelines as they affect resources for implementing programs for visually impaired children, including:
13.1 federal quota funds;
13.2 modified textbooks; and
13.3 talking books.

14.0 Demonstrate the ability to work as a consultant to regular classroom educators, counselors, administrators in an effort to:
14.1 identify inservice needs;
14.2 identify appropriate educational and career opportunities for students with visual impairments; and
14.3 identify appropriate ways to share assessment information about the progress of students with visual impairments.

15.0 Demonstrate the ability to work as a collaborator with other special area experts in an effort to:
15.1 identify inservice needs;
15.2 identify appropriate educational and career opportunities for students with visual impairments; and
15.3 identify appropriate ways to share assessment information about the progress of students with visual impairments.

16.0 Demonstrate an understanding of the role of continued professional growth to refine and develop skills needed

GUIDELINES FOR GRADUATE STUDY

GUIDELINE 1: The program should broaden the teacher's understanding of the purpose and role of education for visually impaired students.

GUIDELINE 2: The program should extend the teacher's understanding of the nature of the learner and the learning process.

GUIDELINE 3: The program will assist the teacher in designing/modifying the learning environment and coordinating resources for the benefit of visually impaired learners.

GUIDELINE 4: The program will extend the teacher's conventional and technological skills in the field of visually impaired education.

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HEARING IMPAIRED

The guidelines and competencies delineated in this section for the area of Hearing Impairment are intended for use in planning, implementing, and approving teacher education programs leading to North Carolina teacher certification in Hearing Impaired at the Bachelor's (A) and Master's (G) levels. These guidelines and competencies complement Council for Exceptional Children and National Council for Accreditation of Teacher Education (NCATE) program standards and should be used when seeking State Board of Education program approval. The program guidelines are conceptual and permit flexibility and diversity in planning courses and/or experiences in colleges and universities. The competencies provided are derived from a conceptualization of the role of a teacher of persons who are hearing impaired. The competencies reflect those expected of a beginning teacher who is prepared to work with students between the ages of 5 and 21 who have hearing losses ranging from mild to profound. Since no sixth year or doctoral level, no guidelines are presented. If such levels are developed, they must delineate appropriate breadth and depth in areas currently specified for graduate study.

The program of preparation at the Bachelor's (A) certification level of a prospective teacher of persons who are hearing impaired is based on the recognition that the individual is preparing to assume the roles and responsibilities of a professional educator. To become a professional educator the prospective teacher should be challenged intellectually by a rigorous program of education and training. To provide a program in which the person may achieve high standards of performance, a teacher should (1) be liberally educated, (2) understand students' needs and how they learn, (3) have competence in the area of specialization, (4) possess qualities needed to work effectively with students, their families, and with other professionals with whom they come in contact, and (5) have a disposition for continued learning as a practicing professional. Therefore, teacher preparation programs at the Bachelor's level in hearing impaired education should be designed to provide for both the common academic and professional needs of all teachers, teachers of children with various exceptionalities, and the specialized needs of those preparing to teach persons with hearing impairments. These professional needs are addressed through program components in general education, professional education, education of exceptional children, and education of persons with hearing impairments.

Programs leading to Master's (G) certification should enable teachers to acquire a depth of understanding of the field of hearing impairments and the ability to serve as an agent for educational change beyond that which is expected of teachers at the Bachelor's certification level. Programs beyond the Bachelor's level should require extensive reading and independent study, encourage students to think independently, and provide opportunities for research. In order for teachers to obtain an appropriate depth of understanding of the field of hearing impairments, it is necessary that they demonstrate/possess the competencies required for Bachelor's certification as well as meeting those at the Master's level. Components of Master's certification programs (G) should include an indepth study in social and behavioral sciences, exceptional children, hearing impairments, research, and leadership skills. Opportunities to demonstrate advanced skills including research should be provided throughout the program.

Guidelines and competencies for programs leading to Bachelor's level teacher certification are included in the following section.

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HEARING IMPAIRED
BACHELOR'S (A) CERTIFICATION GUIDELINES AND COMPETENCIES

GUIDELINE 1: There must be a program of general studies to assure that teachers in the field of hearing impaired education are literate, broadly educated, and cultured persons.

The general studies requirements for teachers in the field of hearing impairments are the same as those for all undergraduate teacher education programs. This guideline may be addressed by requiring students to satisfactorily complete a general studies sequence that has been approved by the National Council for Accreditation of Teacher Education (NCATE).

GUIDELINE 2: There must be a professional studies component that provides teachers in the field of hearing impaired education with a core of knowledge, research, theory, and application in social and behavioral sciences, human growth and development, and teaching and learning theory.

Teachers prepared to teach in the field of education of the hearing impaired should demonstrate the generic professional studies competencies required for all regular education and special education teachers.

GUIDELINE 3: There must be a specialty studies component ensuring the development of a set of core competencies which address the educational needs of the population called exceptional children.

The Core Competencies are appropriate for all teacher preparation programs at the Bachelor's level in the education of exceptional children. These competencies are divided into three sections: Content and Knowledge, Techniques of Teaching, and Professional Attitudes and Values.

GUIDELINE 4: There must be a specialty studies component ensuring the development of a set of competencies that are specific to education of the hearing impaired.

The specific competencies for teachers of the hearing impaired are divided into three sections: Content and Specific Knowledge, Specific Skills/Techniques/Methodologies, and Attitudes and Standards.

BACHELOR'S (A) CERTIFICATION COMPETENCIES

The entry level teacher of the hearing impaired will:

Content and Specific Knowledge

1.0 Identify/demonstrate an understanding of definitions/classification systems

    1.1 Select current definitions of terms, descriptions, and classifications related to hearing loss

2.0 Identify prevalence/incidence of hearing loss among the population

3.0 Identify etiologies of hearing loss and their implications

4.0 Demonstrate knowledge in areas which support instructional efforts including anatomy, audiology, linguistics, and communication

5.0 Define learning and behavioral characteristics by:

5.1 Identifying the characteristics, needs, and development typical of children having hearing losses including those with additional handicapping conditions

5.2 Identifying typical developmental patterns in auditory functioning, communication, speech and language, cognitive functioning, and psychosocial functioning

5.3 Identifying basic linguistic, auditory, educational, and psychosocial needs and their implications in providing services

5.4 Developing tasks appropriate for development of higher level thinking and conceptual development of hearing impaired students

5.5 Identifying various techniques used with hearing impaired students for speech and auditory development, remediation, and maintenance

5.6 Identifying the components of communicative competence to be considered in designing instruction for hearing impaired students (i.e. reading, writing, language)

5.7 Identifying current communication modes used in instructional settings and cite examples of appropriate utilization

5.8 Identifying procedures used to analyze and adapt standard curricular materials for use with hearing impaired students

5.9 Identifying approaches to teaching transition skills within the school environment and from school to adult life

5.10 Identifying evaluation instruments appropriate for hearing impaired students

5.11 Identifying the components of an acoustically appropriate classroom

5.12 Identifying the proper procedures for routine care, maintenance, and use of group and individual amplification equipment

6.0 Identify current and historical attitudes and influences affecting the education of hearing impaired students

7.0 Explain the trends in education of hearing impaired students since P.L. 94-142 and P.L. 99-457

8.0 Define a continuum of services and identify roles and functions of key personnel in various service delivery systems

9.0 Identify professional organizations and governmental agencies on national, state, and local levels that are concerned with issues and services for hearing impaired students

10.0 Identify periodicals and publications relevant to the education of hearing impaired children

11.0 Describe characteristics of deaf culture and deaf culture's place within education of the hearing impaired

Specific Skills/Techniques/Methodologies

12.0 Use evaluation results to develop instructional strategies

13.0 Identify and implement major curricular modifications necessary for hearing impaired and multihandicapped hearing impaired students

14.0 Identify major educational goals of educational programs for hearing impaired students across levels in the areas of auditory functioning, speech production, literacy, content areas, and social functioning

15.0 Demonstrate the ability to plan for individualized and group instruction

16.0 Develop appropriate programmatic goals for age levels birth to 21

17.0 Demonstrate the ability to implement instructional strategies to facilitate learning in hearing impaired students by:

    17.1 Identifying and selecting the essential intervention methods, techniques, materials, and equipment appropriate for hearing impaired students

    17.2 Identifying the educational implications of additional handicapping conditions accompanying hearing loss

    17.3 Identifying media, materials, and equipment, including instructional aids and technological devices most appropriate for use with/by hearing impaired students

Attitudes and Standards

18.0 Demonstrate an understanding of policies and procedures for initial and continuing certification in North Carolina

19.0 Demonstrate the ability to work as a consultant to regular classroom educators, counselors, and administrators

20.0 Demonstrate the ability to work as a collaborator with other specialty area experts

21.0 Demonstrate effective use of paraprofessionals

22.0 Demonstrate an understanding of the role of continued professional growth to refine and develop skills needed

PROGRAM COMPETENCIES SUMMARY

Due to the etiologies of hearing impairment, additional handicapping conditions may often be present. Therefore, these guidelines and competencies are designed to ensure that programs prepare entry level teachers of the hearing impaired to:

a. identify resources within each area of exceptionality;

b. demonstrate ability to modify curricula; and

c. demonstrate ability to individualize, implement, and evaluate said modifications.

Reading and language acquisition is especially problematic for the hearing impaired population with regard to communicative competence. Competencies in the uniqueness of this acquisition should be a prominent part of every program for teachers of the hearing impaired.

GUIDELINES FOR GRADUATE STUDY

GUIDELINE 1: The program should broaden the graduate student's understanding of language acquisition and the affect of language acquisition on communicative competence.

One focus of the graduate program should be language acquisition in hearing impaired students. This should not be studied in isolation but rather as part of the total concept of communicative competence.

GUIDELINE 2: The program should provide opportunity for indepth study of the various modalities and the long range affect of the various modalities on learning and communicative competence.

Graduate students should acquire a clear understanding of the philosophies behind ASL Auditory/Verbal, Cued Speech, Oral, Rochester and Visual English, Total Communication, and Verbo-Tonal. They should be able to compare and contrast these modalities based on the body of research.

GUIDELINE 3: The program should address current technological advances and the impact of said advances on education of the hearing impaired.

The graduate student needs a hands-on knowledge of current technology in the field. This experience would preferably include using the technology with hearing impaired students.

GUIDELINE 4: The program should assist the graduate student in designing/modifying the regular education learning environment to facilitate integration of hearing impaired students.

Adequate time in an integrated setting is required in order to fully understand what modifications are necessary. This field experience should be a focal point of the graduate program.

GUIDELINE 5: The program should involve the graduate student in research relevant to the education of the hearing impaired.

The graduate student should be thoroughly familiar with current research in the field of hearing impaired. In addition the student should be involved in researching current trends in technology, modality and theory.

GUIDELINE 6: The program should involve the graduate student in practicum experiences across modalities, age levels, and degree of hearing loss.

The graduate student should have sufficient field experiences to provide a broad base of understanding regarding the spectrum of hearing impaired individuals and their particular educational and communicative challenges.

Revised 8/91

AUDIOLOGIST

A. Role

The audiologist is the professional specifically trained in the identification, assessment, remediation, and prevention of hearing disorders. The audiologist is uniquely qualified to interact with other school staff members to facilitate understanding of hearing impairment and its implications for the education of individual students. The audiologist performs under the general supervision of the exceptional children program administrator or designee.

B. Program Guidelines for the Preparation of Audiologists

The program for the preparation of audiologists should be planned in accordance with the following guidelines:

GUIDELINE 1: The program provides broad knowledge in the practice of audiology.

Preparation in this area involves knowledge such as anatomy and physiology of the speech and hearing mechanism, hearing evaluation techniques and interpretation, fundamentals of speech production, language acquisition and impairments, habilitation/rehabilitation of the hearing impaired, psychoacoustics, physical acoustics, speech perception, instrumentation, phonology, voice, research, hearing aids and amplification devices, differential auditory diagnosis and special auditory tests, pediatric audiology, principles of sound measurement, and hearing conservation.

GUIDELINE 2: The program provides knowledge in related areas.

Preparation in this area involves knowledge of exceptional children, principles of learning, foundations of education, and overall school curricula.

GUIDELINE 3: The program provides basic knowledge of the organization and operation of school systems and programs.

Preparation in this area includes organization, administration, supervision, program development, and evaluation. Various audiology service delivery models are presented as well as information concerning operational procedures and governing policies such as confidentiality, due process, identification and placement, least restrictive environment, and Individualized Education Programs.

GUIDELINE 4: The program provides opportunities for participation in practicum settings while developing skills.

Preparation includes participation in a variety of practica with supervision by an ASHA certified audiologist. Practica must include 25 work hours in diagnosis and habilitation/rehabilitation with school-age children. Practica must include 50 supervised clock hours in auditory assessment and 50 supervised clock hours in habilitation/rehabilitation. A minimum of 25 work hours must be obtained in a public school setting.

GUIDELINE 5: The program develops awareness of the need for continuing education, research, and professional growth activities.

C. Competencies Needed by Audiologists

NOTE: A master's degree in audiology is required for employment in the North Carolina Public Schools.

Content and Overall Knowledge

1.0 Identify definitions/classification systems

  1.1 Describe auditory disorders, including:

    1.1.1 Conductive disorders

    1.1.2 Sensorineural disorders

    1.1.3 Mixed disorders (conductive and sensorineural)

2.0 Identify prevalence/incidence

3.0 Identify etiology and associated medical implications

4.0 Identify learning and behavioral characteristics

  4.1 Describe normal auditory development and processes, including:

    4.1.1 Linguistic development

    4.1.2 Anatomy, physiology, and neurology of audition

    4.1.3 Social and cultural aspects of auditory development

    4.1.4 Speech and language production and perception

    4.1.5 Auditory perception

    4.1.6 Communicative processes

5.0 Understand acoustics and psychoacoustics

6.0 Understand acoustic phonetics

7.0 Demonstrate knowledge of selection, fitting, orientation and ongoing evaluation (electroacoustic and behavioral) in use of personal and group amplification as well as other assistive devices related to auditory disorders.

8.0 Identify continuum of services

  8.1 Describe comprehensive hearing conservation management programs, including:

    8.1.1 Prevention

    8.1.2 Identification/screening

    8.1.3 Assessment/evaluation

    8.1.4 Rehabilitative and instructional services

    8.1.5 Follow-up, referral, and monitoring

    8.1.6 Technical assistance and administrative support

    8.1.7 Evaluation of program effectiveness

9.0 Identify related services necessary for auditorily impaired children

10.0 Knowledge of current research and literature related to the auditorily impaired

11.0 Knowledge of the effects of auditory impairment on psychological, social, educational, and vocational development

12.0 Identify historical influences and philosophies related to the education of the exceptional child

13.0 Knowledge of organizational and administrative patterns of school systems and how audiology programs and services operate within the total school management and supervisory structure

14.0 Identify legislation and regulations related to the provision of audiological services for children and youth

15.0 Identify and describe functions of professional organizations and governmental agencies concerned with services for auditorily impaired children

Professional Skills/Techniques/Methodologies

The initially certified audiologist should be able to:

16.0 Provide audiological assessment, which may include pure tone and speech audiometry, behavioral audiometry, acoustic immittance tests, evaluation of tolerance and comfortable listening levels, binaural and monaural evaluations, dichotic listening tests, and other psycho-acoustic measures for regular and special needs populations

17.0 Demonstrate knowledge of auditory system pathology

18.0 Provide a program for routine check and maintenance of individual and group amplification systems

19.0 Demonstrate knowledge of the effect of auditory impairment on language acquisition

20.0 Demonstrate skill in the effective use of amplification systems and demonstrate knowledge of the effects of room acoustics on speech perception

21.0 Assess communication skills and remediate deficits in auditorily impaired children (which include speech, language, voice, speech-reading, and auditory training and may include special communicative modes)

22.0 Demonstrate skill in the administration of screening tests of speech and language function and in the effective use of the resulting data

23.0 Initiate and conduct hearing conservation for children and adults

24.0 Counsel auditorily impaired children, their families, teachers, and related professionals in matters relating to management of psycho-social, educational, vocational, communication, and economic issues associated with auditory impairment

25.0 Demonstrate ability to organize and manage hearing screening and assessment programs and supervise ancillary personnel, paraprofessionals, and volunteers

26.0 Demonstrate skills in interdisciplinary efforts to determine the individualized educational program needs, including Individualized Education Program (IEP) development and School-Based Committee participation

27.0 Demonstrate knowledge of calibration techniques and insure routine maintenance and calibration of all audiological equipment

28.0 Develop and maintain appropriate communication with medical and allied health professional

Professional Attitudes and Values

29.0 Identify professional organizations directly related to the area of the auditorily impaired

30.0 Develop cooperative efforts with other professional support personnel and parents, including interdisciplinary team functioning in identification, diagnosis, and treatment of persons with communicative disorders

31.0 Describe the process for involvement in professional organizations

    31.1 Develop a plan for participation in organizations that focus upon communicatively impaired

32.0 Develop a plan for ongoing career growth which may include professional studies, resources for access to and review of professional literature, and attendance at conferences, workshops, and seminars in audiology and related fields

33.0 Identify specific community resources relevant to exceptional children and adults

    33.1 Identify community, State and national sources of funding, services, personnel, and materials for the identification and remediation of the auditorily impaired

    33.2 Identify strategic community resources capable of contributing to programs and the types of contributions associated with these resources

34.0 Identify current issues in the area of the auditorily impaired

35.0 Know the Code of Ethics of the American Speech-Language-Hearing Association

D. Completion of Program and Recommendation for Certification

Each candidate for audiology certification must be recommended by the appropriate university officials.

E. Authorization of Service

To qualify to serve as an audiologist one must complete the master's degree in audiology.

Special Subjects (K-12)

VISUAL ART EDUCATION: GRADES K-12

A. The Purpose and Nature of Visual Arts Education in the School Curriculum

The visual art program serves to provide students with the attitudes, concepts and skills necessary for understanding, producing, and appreciating art in past and contemporary cultures. The discipline based curriculum emphasizes studio production while integrating the history, aesthetics, and criticism of art into the art experience.

B. Guidelines for the Preparation of Visual Art Teachers

In order to carry out the objectives of the K-12 visual art curriculum, institutions that offer teacher certification in the visual arts should use the following guidelines for preparing their program.

GUIDELINE 1: The program for the prospective art teacher should constitute approximately 40 percent of the total undergraduate curriculum. It should also provide for thorough study at advanced levels in a variety of studio areas, art history and methods for teaching art. The program description should exist in a published, easily accessible form.

GUIDELINE 2: The program for the prospective teacher should provide for the development of positive attitudes about oneself, about others, about art, and about art education.

GUIDELINE 3: The program should ensure that the prospective art teacher develop the concepts necessary for understanding and producing art.

GUIDELINE 4: The program should ensure that the prospective art teacher develop the skills necessary for understanding and producing art.

GUIDELINE 5: The program should ensure that the prospective art teacher develop knowledge and appreciation of art in the past and present and of different cultures.

GUIDELINE 6: The program should ensure that the prospective art teacher develop knowledge of art as an avocation and as a profession.

GUIDELINE 7: The programs should ensure that the prospective art teacher develop a sound philosophy of art education and develop knowledge and understanding of art education as a profession.

GUIDELINE 8: The program for the prospective art teacher should provide for the examination of methodologies of teaching and learning with laboratory and clinical experiences at all learning levels and include early field experiences at elementary and secondary levels prior to and including student teaching.

C. Competencies Needed by Teachers to Achieve Program Objectives

In order to ensure that visual art teachers can implement the K-12 art curriculum as outlined in the State Board of Education's Standard Course of Study and provide effective teaching, the following competencies should be met:

1.0 The prospective art teacher should develop positive attitudes about her/himself, about others, about art and about art education. The prospective art teacher will demonstrate positive attitudes about her/himself by being able to:

1.1 Exhibit a positive self-image through the projection of self-confidence and assertiveness in interactions with others

1.2 Express and willingly share his/her philosophy of art

1.3 Define and express personal preferences as a consumer of art

1.4 Exhibit a positive attitude and commitment to the profession of art education

The prospective art teacher will show that he/she accepts work of others by being able to:

1.5 Demonstrate acceptance of individual learning styles, feelings, and capabilities

1.6 Adapt art education theories to individual creative expression and needs

The prospective art teacher will show that he/she is eager to do and see art by being able to:

1.7 Develop continuing competence in personal production and exhibition of original art from a variety of media

1.8 Use the community as a resource for his/her own creative production and stimulation

2.0 The prospective art teacher should develop the concepts necessary for understanding and producing art

The prospective art teacher will demonstrate an understanding of the basic elements of art (color, line, shape/form, texture, space, etc.) by being able to:

2.1 Apply the elements of art in one's own art

2.2 Plan and implement creative art experiences for students which promote understanding and application of the basic art elements at various educational levels

2.3 Discuss the application of the art elements with appropriate vocabulary/terminology

The prospective art teacher will demonstrate an understanding of the basic design principles (unity, variety, emphasis, balance, movement, etc.) by being able to:

2.4 Apply the design principles in one's own art

2.5 Plan and implement creative art experiences for students which promote understanding and application of the design principles at various educational levels

2.6 Discuss the application of the design principles with appropriate vocabulary/terminology

The prospective art teacher will demonstrate an understanding of the role personal perception and observation play in art by being able to:

2.7 Integrate personal experiences, ideas, emotions, and perceptions into one's own art

2.8 Explain the developmental stages of art and how they affect perception, interpretation, and expression in a visual mode

2.9 Plan and implement creative art experiences for students which encourage the integration of personal experiences in a visual mode

The prospective art teacher will demonstrate an understanding of the role creativity plays in art by being able to:

2.10 Identify and explain the characteristics of creative behavior (sensitivity, fluency, flexibility, originality) and be able to re-define, abstract, synthesize, organize, and elaborate in one's own art work

2.11 Exhibit a knowledge and understanding of the major art education learning theories as they relate to forms of creative expression and processes

2.12 Demonstrate an awareness that divergent thinking is essential in the creative process

2.13 Demonstrate an awareness that individuals can approach a creative experience in a variety of ways: spontaneous, intuitive, direct/deliberate, etc.

2.14 Plan and implement learning situations which utilize a variety of approaches in the creative thinking process

2.15 Plan and implement learning situations which promote creative problem recognition, problem solving, and independent thinking

2.16 Create work that does not rely on copying, tracing, or patterns and be able to motivate the same original thinking in students

The prospective art teacher will demonstrate an understanding of the role evaluation/critique plays in art by being able to:

2.17 Demonstrate a growing competence in describing, analyzing, interpreting, and evaluating works of art

2.18 Explain the effect of the developmental stages of the child on the evaluation/critique processes

2.19 Explain the relationship of art knowledge to personal aesthetic choices

2.20 Incorporate basic art vocabulary/terminology in the evaluation/critique processes

2.21 Plan and implement learning situations which encourage the integration and application of evaluation/critique processes at various educational levels

The prospective art teacher will demonstrate knowledge and understanding of the basic concepts of technology and their influence and application in the visual arts (photography, film making, electronic media, etc.) by being able to:

2.22 Define and explain the types of contemporary technology which can now be used as art media and how they are affecting the art of today

3.0 The prospective art teacher should develop skills necessary for understanding and producing art

The prospective art teacher will demonstrate skill and understanding in the basic art processes (drawing and painting, printmaking, sculpture, and fine craft processes (including ceramic)) by being able to:

3.1 Exhibit growing competence in creating original art in each of the basic art processes with extended competence in at least one

3.2 Design and organize art curriculum which apply scope and sequence to each of the basic art processes

3.3 Adapt and utilize a variety of available materials and levels of difficulty in each of the basic art processes

3.4 Physically organize space and materials for art instruction in each of the basic art processes

3.5 Describe the historical evolution of the basic studio processes

3.6 Use specific tools/equipment appropriately and safely and communicate these skills to students

3.7 Explain and practice necessary precautions for avoiding common art hazards and be able to communicate these hazards/precautions to students

3.8 Use appropriate methods for presentation and exhibition for completing art work

3.9 Identify and use available resources for program development and implementation

3.10 Identify and use appropriate current and historic examples of art work related to studio experiences

The prospective art teacher will be able to communicate about art by being able to:

3.11 Use appropriate art vocabulary in the discussion of art production, art history, art criticism, and aesthetics

3.12 Engage in effective dialogue with different levels of learners in discussing art attitudes, concepts, and skills

4.0 The prospective art teacher should develop knowledge and appreciation of art in the past and present in different cultures

The prospective art teacher will demonstrate knowledge, understanding, and appreciation of art and related philosophies from the past and present by being able to:

4.1 Select appropriate examples of art from a variety of cultures to communicate the knowledge of art history and to integrate it with studio experiences

4.2 Identify and explain the major art periods/movements and how they reflect and influence the society/culture in which they exist(ed)

5.0 The prospective art teacher should develop knowledge of art as an avocation and profession

The prospective art teacher will demonstrate the difference between art as an enriching experience and art as a profession by being able to:

5.1 Describe various ways that individuals derive pleasure from creating, viewing, and responding to works of art

5.2 Describe avocations and careers which utilize art knowledge

6.0 The prospective art teacher should develop a sound philosophy of art education and an understanding of the concepts and skills necessary for teaching art by being able to:

6.1 Define and explain the N.C. State Board of Education's Basic Education Program, the Standard Course of Study and the Teacher Handbook

6.2 Differentiate the roles and responsibilities that the State Department of Public Instruction and the local education agencies have for art education in North Carolina

6.3 Exhibit a commitment to the profession of art education through participation in the student professional art organization, reading professional journals, and identifying other art and art-related institutions and organizations for professional growth, etc.

6.4 Design art curriculum based on the State Teacher Handbook for art and develop sequential lessons for various educational and developmental levels

6.5 Prepare and implement art instruction based on the N.C. State Department of Public Instruction's guidelines for Effective Teaching

6.6 Prepare, justify, and regulate a budget for an art program

6.7 Identify multiple sources for art materials, equipment, outside resources, etc. to implement and support the art program

6.8 Identify ways in which community art and arts organizations can be incorporated into the art program

6.9 Identify ways in which the art program can be promoted to classroom teachers, school administrators, and the community

6.10 Explain why personal appreciation, expertise, and involvement in one or more art processes and/or research is important for an art educator

Level II - Computer Competencies – Visual Arts Education

7.0 All visual arts teachers should demonstrate an understanding of basic concepts of computer hardware, software, and peripherals in relation to visual arts education by demonstrating the ability to:

7.1 Exhibit a working knowledge of computer technology

7.2 Set up a computer, including the connection of necessary peripherals

7.3 Exhibit a familiarity with the basic components of a computer system; i.e. input/output, storage, and retrieval

7.4 Perform computer operations: on/off sequence, loading, executing, saving, backing-up of programs

8.0 Visual arts teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer Managed Instruction (CMI), and authoring programs by:

8.1 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the visual arts education program (CAI)

8.2 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); e.g., student enrollment, grades, student performance, individualized education programs (IEP), and other classroom-related recordkeeping

8.3 Identifying, evaluating, and selecting software programs appropriate for clerical recordkeeping in the operation of the classroom/facilities/lab; e.g., inventory of consumable and non-consumable supplies, equipment, instruments, and materials; purchase requests; data and statistical analysis

8.4 Being familiar with authoring systems and knowing how to use these specifically designed software programs for instructional purposes, including modifying these programs for instructional use

9.0 The visual arts teacher should demonstrate an understanding of the use of peripheral devices, both general items and those specific to visual arts education, by:

9.1 Knowing how to use video technology -- videotape recorders/players and laserdisc technology -- to enhance visual arts teaching and learning experiences

9.2 Knowing how to select and use special input and output peripherals for instructional and management purposes

9.3 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the ongoing status of electronic instructional technology

10.0 The visual arts teacher should demonstrate the understanding and use of electronic instructional technology for content specific activities by:

10.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: graphic tablets, light pens, mouse, modem, video cameras

10.2 Knowing how to select and use appropriate printers and interfaces to produce "hard" copies of computer generated art

GUIDELINES FOR ADVANCED VISUAL ARTS PREPARATION PROGRAMS

The program for each candidate should be planned as a logically-organized whole, in continuation of the previous study and in relation to performance on screening procedures. A minimum of 60 percent of the graduate work should be in the individual's major arts field, and a minimum of 20 percent should be free for additional work in this area, in professional education, or for any graduate work that would add to the general competency of the individual.

The master's degree program should provide preparation called for by each guideline, and the sixth-year and doctoral programs should be designed to develop breadth and depth in the same area. The study should be planned so that programs meet the following guidelines:

GUIDELINE 1: The program should provide for concentrated study in the teacher's subject field or fields.

Study in the visual arts education should be characterized by flexibility and differentiation in recognition of individual needs, undergraduate preparation, and professional work experience.

GUIDELINE 2: The program should extend the teacher's understanding of the humanistic and behavioral studies relating to teaching and learning.

Study under this guideline should be a logical extension of undergraduate study dealing with the nature and purpose of contemporary visual arts education, the current school curriculum and programs, identification of problems and issues relating to contemporary visual arts education in their historical and philosophical aspects, and the concepts and principles within the behavioral sciences that have implications for creative learning.

GUIDELINE 3: The program should broaden and deepen the understanding of teaching and learning theory through advanced study accompanied by appropriate clinical experiences.

Preparation under this guideline should include advanced study in the body of knowledge dealing with teaching and learning theory. The study and clinical experiences should enable the teacher to understand the theoretical principles that explain accepted professional practices, explore alternative educational delivery systems, and extend the ability to make practical applications. While this does not necessarily imply the traditional study-teaching experiences, there should be evidence of field-based research or special projects which provide for appropriate involvement in visual arts education.

GUIDELINE 4: The program should assist the teacher in gaining greater insights and skills in the use of the techniques of research and in designing and carrying out research projects.

Emphasis in this area should be on the study of appropriate visual arts education research methods and findings suitable for visual arts education and on giving the teacher the necessary understanding and skills to develop practical research in the visual arts classroom situations and to extend the ability to utilize information from research reports in visual arts education in improving creative learning situations.

Revised 12/89

DANCE - GRADES K-12

A. The Purpose of Dance Education in the School Curriculum

Consistent with the general purposes of arts education, dance education exists in the schools to provide an opportunity for the student to:

- experience oneself as an integrated being in motion
- participate in the creative process which enhances all learning
- experience dance as meaningful, communicative, and aesthetic
- understand dance as a process of exploring, forming, and performing
- understand dance in its social/cultural/historical context
- realize dance and its ramifications as career potential, and as life enrichment, as both participant and audience

B. Guidelines for the Preparation of Dance Teachers

The program for the preparation of dance teachers should constitute a minimum of forty percent of the total undergraduate curriculum, planned in accordance with the following guidelines:

GUIDELINE 1: The program should provide for the development of a sound philosophy of creative arts education as it applies to dance and the facilitation of translating this philosophy into action.

Dance exists in the schools to provide students the opportunity to involve themselves actively in dance as a creative art and should be child-centered.

GUIDELINE 2: The program should provide for a thorough study of all aspects of dance included in the K-12 curriculum.

The public school dance education program is based primarily on the principles of modern dance which embrace a variety of creative approaches. These principles include:

- a thorough study of the body as an instrument for dance

  This should include aspects such as anatomy, kinesiology, injury prevention/care, nutritional concerns, and body integrating techniques.

- exploring movement, forming movement concepts, and performing these concepts
  - Exploring movement includes work in improvisation, creative problem solving, divergent thinking, and movement analysis.
  - Forming movement includes a thorough knowledge of the scientific and aesthetic principles underlying motion and an application of this knowledge to dance technique and choreography.
  - Performing includes opportunities to construct and participate in choreography in formal and informal situations using appropriate production skills as well as guided practice in watching and criticizing dance as art.

- an understanding and appreciation of dance in its social/cultural/historical context

  The student should have the opportunity to develop a concept of the continuing interchange of culture and civilization. Study should include historical, ethnic, and social forms.

GUIDELINE 3: The program should provide for the examination of methodologies of teaching and learning through practical lab experiences in public school settings at all grade levels.

The program should establish an awareness of the general school activity and the part of dance in enlarging learning possibilities within these activities. The prospective teacher should be able to develop programs which support and enrich the educational efforts of schools. Strategies might include the informal use of dance in the classroom, the building of an awareness of the relation of dance to other subject areas, and the occupational potential of dance. Laboratory experience in this guideline area should begin well before the formal student teaching program.

GUIDELINE 4: The program should develop the capacity and disposition for continued learning in the field of dance.

The program should develop the habits and attitudes necessary for continued learning, both formal and informal. New developments and the rapid pace of change in the field of dance education require that teachers upgrade their professional capabilities on a continuing basis, using such means as in-service education, individual study, formal graduate study, and membership in professional dance organizations.

C. Competencies Needed In Dance Education

In order to ensure that danced educators can implement the K-12 dance program as outlined by the N.C. Board of Education Standard Course of Study and provide effective teaching, the following competencies should be met:

Personal Attitudinal Competencies

1.0 There are certain attitudes which the dance educator must develop to ensure success as a professional dance educator. The dance educator shall:

  1.1 Demonstrate a responsible, positive, and accepting attitude toward self as a professional dance educator

  1.2 Demonstrate genuine interest in human development and dance as a rich medium for individual sequential growth

  1.3 Demonstrate an intense dedication and commitment to public education and an understanding of dance as a part of this overall process.

  1.4 Demonstrate an awareness of the importance of dance as both art and science

  1.5 Demonstrate an awareness of the importance of dance and other arts as an integral part of life experience for all children

1.6 Demonstrate a commitment to the highest standards for an effective program and flexibility in dealing with limitations to its implementation

Professional Competencies

2.0 To be successful as a professional teacher, the dance educator shall:

2.1 Demonstrate competence, responsibility, and confidence as a professional educator including a commitment to professional growth skills and life-long learning

2.2 Demonstrate a level of dance proficiency appropriate for implementation of the Standard Course of Study

2.3 Inspire and guide others toward self-direction, self-discipline, and self-evaluation through dance

2.4 Communicate effectively with all segments of the public school community

2.5 Establish a partnership with school staff members to ensure, through consultation, planning, and training, positive dance experiences for all students

2.6 Utilize a variety of extended community resources to broaden experiences for themselves as well as the students

2.7 Demonstrate and share an awareness of the availability of institutions, organizations, and special programs which facilitate the dance experience beyond the secondary school level, including career alternatives

3.0 Scope and sequence are essential for a well organized dance program. The dance educator shall:

3.1 Understand the role of curriculum design, implementation, and evaluation

3.2 Develop lesson plans based on sequential learning experiences which support a K-12 curriculum

3.3 Implement curriculum which produces a maximum level of child-centered achievement

3.4 Select and adapt the curriculum as appropriate for various individuals, categories, and exceptionalities

4.0 Because evaluation is an important part of all learning experiences, including those related to students, teachers, and program, the dance educator shall:

4.1 Formulate criteria for dance based on a knowledge of State and local standard evaluative practices and procedures

4.2 Recognize individual synthesis of material and encourage self-evaluation as a natural part of the dance discipline

4.3 Design and implement experiences that lend themselves to different methods of evaluation

Dance Knowledge and Skill

4.0 To achieve the objectives of a comprehensive K-12 program, the dance educator should possess a working knowledge of the body as the instrument of dance and the importance of kinetic awareness; therefore, the dance educator shall:

5.1 Demonstrate an understanding of basic anatomy and kinesiology and apply these sciences naturally and effectively at the student's level of readiness

5.2 Analyze and correctly study movement to encourage efficiency and ensure safety

5.3 Demonstrate an awareness of healthful living as reflected by positive attitudes, nutritional concerns, injury prevention, and care for the body as an instrument of dance

6.0 To emphasize creative modern dance as the central focus of the curriculum, the dance educator shall:

6.1 Demonstrate an understanding of motion in its time/space energy analysis, as the vocabulary for communicating in dance

6.2 Demonstrate and apply important principles of movement as appropriate with various styles of dance including, but not limited to, proper body alignment, line, flexibility, breadth, and flow.

6.3 Demonstrate how creative modern dance is similar to and different from other styles of dance and other forms of movement

7.0 To emphasize dance as a creative art, the teacher must understand the process of exploration and improvisation. The dance educator shall:

7.1 Perceive and facilitate creative problem solving within the dance experience

7.2 Use the process of exploration and improvisation to develop composition and appropriate technique for various grade levels

8.0 To emphasize dance as a creative art, the dance educator shall:

8.1 Understand the basic process of choreography

8.2 Form and extend movement sequences into larger patterns to make dance

8.3 Integrate the elements of time, space, and energy to communicate through dance

  8.4 Analyze choreography in process to enhance and refine work through to completion

9.0 To understand dance as a means of communication, students at all levels should experience dance as spectators, performers, and creators. The dance educator shall:

  9.1 Guide students to communicate thoughts, ideas, and feeling(s) through the choreographic process

  9.2 Retain and refine movement to enhance communication

  9.3 Make available formal and informal opportunities for sharing student-initiated choreography

10.0 To promote aesthetic awareness, the dance educator shall:

  10.1 Understand theories of aesthetic education and apply these appropriately to the dance experience

  10.2 Design and facilitate experiences which help students develop critical thinking skills including observation, analysis, discernment, and synthesis

  10.3 Facilitate aesthetic experience through enhancing the ordinary

11.0 To fully appreciate dance as an art form one must understand its sociocultural historical context. The dance educator shall:

  11.1 Emphasize the continuing significance of dance within the development of civilization world-wide

  11.2 Present dance as ritual within the various global cultures

  11.3 Present social, folk, recreational, fad, and classical dance forms as contributors to the art of creative modern dance

12.0 Through an integrated curriculum an awareness is established of the interrelatedness between the home, school, and community environments and subject areas which facilitates the learning process. The dance educator shall:

  12.1 Encourage an understanding of concepts and processes over the mere acquisition of isolated facts.

  12.2 Encourage lessons which allow students to see relationships and patterns and make generalizations using these relationships and patterns

13.0 Although dance is an art form with its own discipline, there are natural relationships among all major art forms. To retain a natural interdisciplinary relationship, the dance educator shall:

13.1 Demonstrate an understanding of basic principles of design as conceptualized in the visual arts

13.2 Demonstrate an understanding of basic principles of music and their relation to the visual arts

13.3 Demonstrate an understanding of basic principles of theatre and their relation to the experience

13.4 Demonstrate an understanding of the basic principles of literary arts with the emphasis on word images, symbols, and qualitative creative expression

14.0 Accompaniment for dance is an important aspect of the K-12 program. The dance educator shall:

14.1 Select and provide a wide range of appropriate accompaniment for a variety of movement experience

14.2 Design experiences which allow students to create and provide their own accompaniment for dance

15.0 Basic knowledge of a variety of production skills is required to provide performing opportunities for students at all levels. The dance educator shall:

15.1 Organize production planning and rehearsal scheduling to ensure the success of dance performance

15.2 Use a variety of performance environments to enhance and promote adaptability in a safe and effective manner

15.3 Use basic principles and equipment for sound and lighting when appropriate

15.4 Use basic principles of stage direction, set, costume, and make-up design when appropriate

16.0 A progressive dance program incorporates the use of technology. In addition to the level 1 computer competencies, the dance educator shall:

16.1 Demonstrate a basic knowledge of appropriate software to enhance dance class including dance concepts and vocabulary, dance history, anatomy and kinesiology, and choreography

16.2 Utilize video tape and disk recorders and players to enhance creative dance experiences

16.3 Actively seek information pertaining to the constantly changing nature of electronic instructional technology

Level II - Computer Competencies – Dance Education

17.0 All dance teachers should demonstrate an understanding of basic concepts of computer hardware, software, and peripherals in relation to dance education by demonstrating the ability to:

- 17.1 Exhibit a working knowledge of computer technology
- 17.2 Set up a computer, including the connection of necessary peripherals
- 17.3 Exhibit a familiarity with the basic components of a computer system; i.e. input/output, storage, and retrieval
- 17.4 Perform computer operations: on/off sequence, loading, executing, saving, backing-up of programs

18.0 Dance teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer Managed Instruction (CMI), and authoring programs by:

- 18.1 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the dance education program (CAI)
- 18.2 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); e.g., student enrollment, grades, student performance, individualized education programs (IEP), and other classroom-related recordkeeping
- 18.3 Identifying, evaluating, and selecting software programs appropriate for clerical recordkeeping in the operation of the classroom/facilities/lab; e.g., inventory of consumable and non-consumable supplies, equipment, instruments, and materials; purchase requests; data and statistical analysis
- 18.4 Being familiar with authoring systems and knowing how to use these specifically designed software programs for instructional purposes, including modifying these programs for instructional use

19.0 The dance teacher should demonstrate an understanding of the use of peripheral devices, both general items and those specific to dance education, by:

- 19.1 Knowing how to use video technology – videotape recorders/players and laserdisc technology – to enhance dance teaching and learning experiences
- 19.2 Knowing how to select and use special input and output peripherals for instructional and management purposes
- 19.3 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the ongoing status of electronic instructional technology

20.0 The dance teacher should demonstrate the understanding and use of electronic instructional technology for content specific activities by:

- 20.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: keyboards, graphic tablets, electronic synthesizers
- 20.2 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated dance notations to assist in the development of choreography

ADVANCED LEVEL DANCE CERTIFICATION

The program for each candidate should be planned in a logically-organized whole, in continuation of the previous study and in relation to the enhancement of professional educational dance expertise for preparation to instruct at the K-12 level. A minimum of 60 percent of the graduate work should be in the discipline of the teacher's subject or academic field, and a minimum of 20 percent should be free for additional work in the subject field, in professional education, or for any graduate work that would add to the general competency of the individual.

The master's degree program in dance should be planned so that it meets the following guidelines:

GUIDELINE 1: The program shall provide for concentrated study in dance education for grades K-12.

This study in dance shall be characterized by flexibility and differentiation in recognition of individual needs and differences in backgrounds of education and experience.

GUIDELINE 2: The program shall extend the teacher's understanding of the basic humanistic and behavioral studies related to the teaching and learning of dance.

The study in dance should be a logical extension of undergraduate study dealing with the nature and purposes of education; the school curriculum; the problems and issues relating to education in their historical and philosophical aspects; and the concepts and principles within the behavioral sciences that have implications for education.

GUIDELINE 3: The program shall broaden and deepen the understanding of teaching and learning theory as it applies to dance education through advanced study accompanied by appropriate clinical experiences.

Preparation under this guideline should include advanced study in the body of knowledge dealing with teaching and learning theory applicable to dance education K-12. The study and practical experiences should enable the teacher to understand the theoretical principles that explain accepted professional practices and extend the ability to make practical applications. While this does not necessarily imply the traditional student-teaching experiences, there should be evidence of field-based research or special projects which provide for appropriate involvement in this area.

GUIDELINE 4: The program shall assist the teacher in gaining greater insights and skills in the use of techniques of research and in designing and implementing research projects in dance education K-12.

Emphasis in this area should be on the study of research methods and findings, and on giving the teacher the necessary understanding and skill to develop action research in classroom situations and to extend the ability to utilize information from research reports in improving learning situations.

COMPLETION OF PROGRAM

The fifth-year program should normally lead to the master's degree. When a sixth year or beyond is involved, the institution should grant appropriate recognition for completion of the program.

RECOMMENDATION OF INSTITUTION

Each candidate for a certificate must be recommended by the appropriate college officials. The recommendation must certify the completion of a master's degree level, sixth-year level, or doctoral-level program and must be accompanied by supporting transcript(s) or credit(s).

Revised 12/89

MUSIC EDUCATION: GRADES K-12

A. The Purpose and Nature of Music Education in the School Curriculum

Consistent with the general purposes and objectives of arts education, music education exists in the school curriculum to sharpen and focus perception, to provide for non-verbal as well as verbal communication, to supply a means for enjoyment and personal expression, and to develop the skills necessary for performance. Through sharing music from the broad span of history as well as from varied cultures and ethnic groups, students increase awareness of their own relation to the world. In creating music, the student discovers new dimensions and capabilities not previously suspected. Ultimately, music in the public school program serves to develop the ability to hear, to know what is heard, to perceive its various meanings, and to express them through diverse modes of performance. The basic approach to music for the student as a consumer, performer, creator, and/or teacher is provided through the public school program.

B. Guidelines for the Preparation of Music Teaches

All aspects of the program of preparation for the prospective music teacher should contribute to the development of total musicianship.

Because of the K-12 span of this preparation and because the music teacher is frequently assigned to situations where work must be carried out without the benefit of information and assistance from other music teachers, the preparation for this area must necessarily be especially comprehensive. This need for comprehensiveness implies an integrated curriculum which will synthesize the component elements, processes, and characteristics of music. The program should provide for involvement in the artistic, technological, and humanistic aspects of music.

The program for preparation of music teachers should constitute a minimum of 40 percent of the total undergraduate program, planned in accordance with the following guidelines:

GUIDELINE 1: The program should provide for the development of a comprehensive and integrated understanding of music composition, theory, literature, and history.

In support of this guideline, the program should provide for related involvement in basic areas of the musical experiences: composition, performance, and critical analysis. Music theory and history should be considered as essential to improvisation, composition, analytical study, and the performance of music. Music literature from a broad sampling of times and places should be studied. Ideally, such a study would be balanced between traditional idioms and current practices including youth, ethnic, aleatoric, and electronic music. Emphasis should be given to the relationship of contemporary theory and practices to those of the common practice period, recognizing the twentieth century as the repository of a continuing music history. Within this context, emphasis should be given to the structural elements of pitch, texture, rhythm, timbre, tempo, dynamics, and forms as they relate to the stylistic and expressive nature of all music.The objective of preparation in this guideline area is the development of a comprehensive musician defined in terms of skills development, knowledge, and value judgement ability as a music creator, performer, listener, and teacher.

GUIDELINE 2: The program should provide adequate preparation in conducting, analyzing, arranging, and composing.

Preparation in this area should be considered an upper-level extension of the basic studies program described under the previous guideline. The various musical competencies and understandings resulting from the study of theory and literature should be extended and expanded in the content areas listed. Program offerings at this stage should encourage the student to develop an integrated musical relationship of the various areas represented.

Formal preparation should include the development of both conducting and rehearsal techniques along with the understandings related to the unique educational responsibilities of the school music conductor.

GUIDELINE 3: The program should provide for the development of musical sensitivity and technical proficiency in performance areas.

The course of study should be designed to allow for a substantive emphasis in at least one area of applied music. Proficiencies to be developed should include the accurate and expressive performance of the standard studio, solo, and ensemble literature appropriate to the particular major. Ensemble experience should not be restricted to the larger performance organizations of band, orchestra, and chorus, but should also be coordinated with studio study and small ensemble work. Requirements in the major areas of applied music should be considered in terms of musical and technical standards and breadth of ensemble experience rather than credit hours or year study.

The program should provide for a substantive emphasis in supportive areas of music performance. As a result of such emphasis, the prospective teacher should demonstrate keyboard proficiency in reading, transposing, ind improvising accompaniments appropriate to the needs of a wide variety of instructional settings. While the piano has been traditionally utilized for this purpose, experience on various fretted and keyboard instruments should also be included.

Also, as a result of study in the supportive areas, the prospective teacher should demonstrate adequate knowledge and understanding of vocal techniques, and an experiential familiarity with representative instruments of the wind, string, and percussion families. Additional preparation in the supportive performance area should be individualized to meet the specific needs and interests of each student.

GUIDELINE 4: The program should provide for proficiency in the use of technology appropriate to music education.

Preparation in this area should include the development of skills necessary for the production and control of electronically modified and synthesized sounds, including an understanding of the principles of sound synthesis, along with their potential aesthetic and expressive applications. Additionally, experiences should be provided in the functional application of computers to varied aspects of the music education program, including those related to instructing, record-keeping, managing, composing, arranging, producing, and scoring.

GUIDELINE 5: The program should provide a philosophical basis for the planning and implementation of an inclusive program of music education consistent with the aesthetic nature and function of music and the others in a diverse society.

The prospective music teacher should be able to state and to implement a philosophy of music education for the K-12 program and be able to design curriculum that includes goals, objectives, expected outcomes, and appropriate evaluation procedures. This should be based on the aesthetic nature and function of music in society. In order to achieve this intent, experiences should be provided in the design, development, implementation, and evaluation of varied curricular offerings.

GUIDELINE 6: The program should provide opportunities for the development of teaching styles and communication and managerial skills pertaining to the music teaching process at all levels.

Preparation in this area should be directed toward the development of teaching styles demonstrating the aesthetic and expressive nature of music; the principles of concept and discovery learning; the structure of the musical art; the developmental nature of music learning; the use of instructional media; and the selection of music literature, materials, and activities appropriate to the specific learning outcomes desired.

Specific emphasis in the broad areas of general, instrumental, and choral music should be provided. Field experiences in this guideline area should begin well before the formal student-teaching program and be a component of the professional curriculum.

GUIDELINE 7: The program should provide opportunities for advanced preparation in areas determined by the special needs and interests of the prospective teacher.

Emphasis in this guideline area would involve upper-level elective preparation in areas such as theory, music history, pedagogy, performance, research procedures, computer applications, ethnic music, contemporary music, conducting, composition, the psychology of music, and the broad areas of philosophy and aesthetics.

GUIDELINE 8: The program should develop the capacity and the disposition for continued learning in the field of music.

The program should develop in the student the habits and attitudes necessary for continued formal and informal learning. New developments and the rapid pace of change in the field of music require that teachers upgrade their professional capabilities on a continuing basis using such media as inservice education, individual study, and formal graduate study.

It should develop in the prospective teacher an awareness that technology is constantly changing and that the individual professional must continue to seek updated information pertaining to the status of electronic instructional, creative, and performance technology.

Additionally, the program should develop in the student an awareness of the importance and benefits of membership and participation in professional education organizations.

C. Competencies Needed by Teachers to Achieve Program Objectives

Composition/Literature/History/Theory

1.0 In order to carry out the objectives of the K-12 music program, the professional music teacher should possess a working knowledge of music theory, history, and literature. For this reason, the music teacher should demonstrate:

- 1.1 The ability to use a knowledge of music history and theory to enlarge the students' understanding of music and the evolution and characteristics of styles
- 1.2 A knowledge of music literature suitable for various age levels and the ability to select music appropriate for the ensemble and/or individual student
- 1.3 A knowledge of basic music vocabulary/terminology essential to the teaching of music in the schools, K-12
- 1.4 The ability to use and the knowledge of the importance and nature of the music of various world cultures, including American music, i.e. black, folk, jazz, musical theatre, music of North Carolina composers, and twentieth-century music
- 1.5 The ability to compose, arrange, edit, and improvise choral and instrumental music in a variety of styles appropriate for school situations, K-12
- 1.6 A functional ability to sight-sing
- 1.7 The ability to analyze and interpret representative works of the past and present and to perform and/or teach them with understanding

Performance

2.0 The teacher of music should possess functional performance skills in order to implement the program in the schools. For this reason, there should be demonstrated evidence of:

- 2.1 A broad musical background based on a comprehensive understanding of music, and the ability to integrate this understanding into artistic musical expression
- 2.2 Major solo performance capability in at least one medium, as well as minor performance capability
- 2.3 The ability to perform simple accompaniments on the piano
- 2.4 The ability to perform simple accompaniments on fretted instruments and autoharp

Technical

3.0 The music teacher should possess technical expertise in the implementation of the program in the public schools and should demonstrate:

3.1 An understanding and knowledge of staging and the visual presentation of ensembles in performance

3.2 The ability to make effective use of sound and lighting systems commonly found in the public schools

3.3 The ability to perform simple instrument repairs

3.4 A basic knowledge, understanding, and ability to use current electronic equipment appropriate for music education, such as synthesizers, sequencers, effects devices, etc.

3.5 A basic knowledge, understanding, and ability to use MIDI, including interconnection of MIDI equipment and channel allocation

Professional Skills/Techniques/Methodologies

4.0 In order to instruct effectively, the music teacher should demonstrate:

4.1 A basic understanding of the human vice as a musical instrument and the basic ability to use his/her own voice effectively and stylistically

4.2 Basic knowledge and techniques in working with young singers and the changing voice, including the ability to develop appropriate tone quality

4.3 Sufficient techniques to demonstrate and teach representative musical instruments at beginning levels of proficiency. Students electing additional preparation in instrumental music should be able to demonstrate and teach each of the instruments used in school music program

4.4 Conducting skills and teaching techniques sufficient to elicit a musical performance from both choral and instrumental ensembles at all levels, K-12

4.5 The ability to use aural, visual, and kinesthetic modes of learning in the teaching of the basic elements of music

4.6 A basic knowledge of and techniques for working with movement appropriate for all levels of the program

4.7 A working knowledge of music texts and other source materials at all levels

4.8 The ability to prepare and evaluate lesson plans, including the statement of objectives and strategies to accomplish them

4.9 The knowledge of and ability to apply effective classroom management skills effectively

4.10 The knowledge of and the ability to apply time and stress management skills effectively

4.11 Practical approaches to the teaching of music reading and the ability to adapt these approaches to children of varied age and ability levels

4.12 A working knowledge of diverse approaches to student instruction at differing age and ability levels

4.13 A working knowledge of diverse approaches to the instruction of exceptional students, including the requirements of P.L. 94-142 and the preparation of IEPs

4.14 The ability to convey to students creative approaches to the study and performance of music which will enable them to become consumers as well as performers of music

4.15 The ability to inspire students to participate in a diversified program of music which will enable them to become consumers as well as performers of music

4.16 The ability to evaluate musical performance and student work and to involve students in the evaluative process

4.17 The ability to utilize electronic techniques sufficiently to help students to develop the ability to compose with sound

4.18 A knowledge of the structure of public school education in North Carolina From the State Board of Education Program, Standard Course of Study, Teacher Handbook, the Teacher Performance Appraisal Instrument and the Public School Laws of the State

4.19 An awareness of effective financial management of school programs, including budget operations, bidding procedures, lease-purchase contracts, estimation of travel costs, etc.

4.20 An awareness of general operation policies of LEAs, including those related to the scheduling and presentation of music programs, field trips, funding sources, etc.

4.21 A knowledge of the copyright law, including its requirements and the teacher's potential liabilities

Professional Values

5.0 In order to promote music education in the classroom, school, and community, the professional music teacher should demonstrate:

5.1 The ability to define and express a positive philosophy of music education and to relate this philosophy to the requirements of the North Carolina Standard Course of Study

5.2 The ability to demonstrate an understanding of varied psychological theories and learning styles

5.3 The ability to use psychological principles and learning theory in the teaching of music

5.4 The ability to evaluate personal teaching effectiveness

5.5 A knowledge of organizations and structures for music education, including the state MEA handbook and other professional publications

5.6 The ability to communicate appropriately, both verbally and in writing

5.7 The ability to relate positively to students, school personnel, and society

5.8 An understanding and respect for other arts disciplines

5.9 A recognition of the role of music education as a part of aesthetic experience at all levels of instruction

5.10 The ability to articulate sequence and continuity in the music curriculum, K-12

5.11 A recognition of the need for a vital and diversified music curriculum in the schools which will encourage continued musical growth and involvement beyond the years of formal education

5.12 A recognition of the value and role of out-of-school music participation

5.13 The ability to put student needs ahead of personal needs

Level II - Computer Competencies -- Music Education

6.0 All music teachers should demonstrate an understanding of basic concepts of computer hardware, software, and peripherals in relation to music education by demonstrating the ability to:

6.1 Exhibit a working knowledge of computer technology

6.2 Set up a computer, including the connection of necessary peripherals

6.3 Exhibit a familiarity with the basic components of a computer system; i.e. input/output, storage, and retrieval

6.4 Perform computer operations: on/off sequence, loading, executing, saving, backing-up of programs

6.5 The ability to identify, evaluate, and select software programs appropriate for classroom management (CMI); i.e. student enrollment, grades, and classroom-related record keeping

6.6 The ability to identify, evaluate, and select software programs appropriate for clerical record keeping in the operation of the classroom, including robe and uniform inventory and assignment, maintenance of music library, inventory of necessary consumable and non-consumable supplies, equipment and materials, purchase requests, data collecting, etc.

6.7 The ability to identify, evaluate, and select software programs appropriate for instructional purposes in the music education program (CAI)

6.8 Familiarity with authoring systems designed to aid in the development of CAI music software

The music teacher should demonstrate an understanding of and the ability to use peripheral devices for enhancing the computer as a creative instructional tool by exhibiting:

6.9 A knowledge of the computer as an aid in the composition, scoring, and arranging of music

6.10 A familiarity with and an understanding of the use of peripherals and related software, i.e. graphic tablet, mouse, etc.

6.11 A knowledge of the use of the video tape and video disk, along with related software, to enhance music education experiences

6.12 A knowledge of the selection and use of printers to produce hard copies of computer generated information

GUIDELINES FOR ADVANCED MUSIC PREPARATION PROGRAMS

The program for each candidate should be planned as a logically-organized whole, in continuation of the previous study and in relation to performance on screening procedures. A minimum of 60 percent of the graduate work should be in the individual's major arts field, and a minimum of 20 percent should be free for additional work in this area, in professional education, or for any graduate work that would add to the general competency of the individual.

The master's degree program should provide preparation called for by each guideline, and the sixth-year and doctoral programs should be designed to develop breadth and depth in the same area. The study should be planned so that programs meet the following guidelines:

GUIDELINE 1: The program should provide for concentrated study in music education.

The program content for this study should be based on individual needs and differences and should be designed to enhance the music teacher's overall educational and experiential background for further work in this field.

GUIDELINE 2: The program should extend the teacher's understanding of the basic forces which have influenced and continue to influence music education.

Study under this guideline should lead to a deeper understanding of the nature and purposes of education; the school curriculum; programs and issues relating to education in their historical and philosophical aspects; and the implications of recent research which has applications to music education.

GUIDELINE 3: The program should broaden and deepen the understanding of teaching and learning theory through advanced study accompanied by appropriate clinical experiences.

Preparation under this guideline should include advanced study in the body of knowledge dealing with teaching and learning theory. The study and clinical experiences should enable the teacher to understand the theoretical principles that explain accepted professional practices, explore alternative educational delivery systems and extend the ability to make practical applications. While this does not necessarily imply the traditional student-teaching experience, there should be evidence of field-based research or special projects which provide for appropriate involvement in this area.

GUIDELINE 4: The program should assist the music teacher to develop a functional research capability.

Emphasis in this area should be on the attainment of greater insight and capability in the use of research techniques, the interpretation of research findings, on developing the necessary understandings and skills to carry out action research in classroom situations, and to the application of information from research reports to the improvement of the teaching/learning situation in music education.

COMPLETION OF PROGRAM

The fifth-year program should lead to the master's degree. When a sixth-year program is involved, the institution should grant appropriate recognition for completion of this program.

RECOMMENDATION OF INSTITUTION

Each candidate for a certificate must be recommended by the appropriate college official(s). The recommendation must certify the completion of the master's degree level or sixth-year level, or doctoral-level program and must be accompanied by supporting transcript(s) or credit(s).

Revised 12/89

THEATRE ARTS: GRADES K-12

A. The Purpose of Theatre Arts in the School Curriculum

Consistent with the general purposes of arts education, theatre arts education exists in the schools to:

- develop students' understanding of the ideas, attitudes, beliefs, and feelings of people in different times throughout history, as communicated through literature and theatre
- involve students in learning through developmental and activity-oriented processes
- assist students with using and controlling the emotions for communication, strengthening the imagination, expanding intellectual horizons to include an aesthetic awareness, and providing a basic of understanding and critical appreciation of theatre arts
- involve students in the practical application of reading, viewing, preparing to perform, performing, directing, technical production, and writing of traditional and experimental theatrical forms
- involve students the study of what playwrights seek to convey and how this is intensified through theatrical production
- help students develop observation skills, communication skills, and the ability to exercise critical thinking and make decisions through theatrical experiences
- help students develop confidence, personal discipline, and the ability to work effectively with others
- help students realize creative potential and be involved in the creative process
- to prepare students for future educational, avocational, and/or vocational theatre arts experiences

B. Guidelines for the Preparation of Theatre Arts Teachers

In the preparation of theatre arts teachers a minimum of 40 percent of the undergraduate program will be theatre arts, planned in accordance with the following guidelines:

GUIDELINE 1: The program will provide for a comprehensive study in dramatic literature and theatre history.

This study should include a survey of plays, periods and styles of theatres, methods of production, styles and techniques of acting, and important people throughout theatre history and literature. This study will assist the teacher to establish a foundation for teaching all other theatre arts curriculum.

GUIDELINE 2: The program will provide instruction and extensive practical experiences in teaching creative dramatics for a variety of grade levels from elementary to secondary schools.

This study will focus upon all of the current, widely accepted approaches and techniques used in teaching creative dramatics. As part of this study, students should apply these methodologies in a variety of supervised classroom settings.

GUIDELINE 3: The program will provide for practical training in acting and directing.

This study should consider the elements of acting such as various techniques, characterization, styles of acting, speech for theatre, and stage movement. The study should also deal with such major problems of the director as interpreting the script, planning the production, casting, working with actors, and conducting rehearsals. The director-teacher should also be aware of the proper procedures and techniques for conducting creative dramatics. Practicum experiences in various aspects of acting and directing will be inherent to this study.

GUIDELINE 4: The program will provide for a study of the techniques involved in teaching technical theatre for students, K-12.

This study will cover scenery, costume, lighting, sound, props, and makeup. Practicum experiences in all aspects of technical theatre to include stage management will be inherent to this study.

GUIDELINE 5: The program will establish an awareness of the various total school environments and the role of theatre arts within these environments.

This study should establish an awareness of the diversity and challenges of various total school environments, student populations, administrators, and other personnel. In addition, it should prepare the teacher(s) to develop and implement a theatre arts instructional program and appropriate learning environment that is relevant and plausible to their own particular teaching situation.

GUIDELINE 6: The program will develop an awareness of the importance for theatre arts teachers to continue personal and professional growth and learning in order to enhance their capacity to teach theatre arts.

New developments and changes in theatre and theatre arts education necessitate theatre arts teachers to upgrade teaching effectiveness on a continuing basis. Thus, the program should develop the habits and attitudes necessary to foster continued improvement through theatre experiences as well as informal and formal learning.

C. Competencies Needed by Theatre Arts Teachers to Achieve Program Objectives

Professional Skills/Techniques/Methodologies

1.0 In order to instruct effectively, the theatre arts teacher should be able to:

    1.1 Organize and manage curricula and co-curricular theatre arts programs and experiences to include theatre productions

1.2 Design, demonstrate, and teach units that enable students to develop their interests and creative abilities in technical theatre such as set design, construction, stage management, lighting, costuming, make-up, sound, and properties

1.3 Demonstrate, use, and teach students how to use equipment and materials involved in all aspects of technical theatre

1.4 Use and instruct students how to use radio, television, film, and audio visual equipment for instructional and learning purposes

1.5 Design and teach units that enable the students to express themselves through creative dramatics such as mime, improvisation, role playing, and poetry and story dramatization

1.6 Create an awareness in students of standard American speech for the theatre, as well as demonstrate and teach articulation, projection, timing, and vocal variety

1.7 Demonstrate and teach creative and stage movement and conditioning appropriate for self-expression and acting

1.8 Perform and teach the basic tasks of the actor to include research, character analysis, styles of acting and performance, and participation in ensemble

1.9 Produce formal and informal theatre in a variety of places such as proscenium stage, arena stage, thrust stage, and "found" spaces

1.10 Teach the basics of the playwriting processes to include the writing of scenarios, adaptations, and scripts

1.11 Perform and teach traditional directing skills and techniques

1.12 Teach theatre history and literature through units or by integration into other theatre instruction or curricula areas

1.13 Develop strategies in theatre arts to serve special populations such as mentally, physically, and emotionally handicapped, and academically gifted

1.14 Perform, participate in, and facilitate age-appropriate creative dramatics experiences for students

1.15 Demonstrate, implement, and teach correct safety practices and emergency procedures related to all aspects of theatre activity including routine maintenance of the theatre facility and equipment to foster accident prevention

1.16 Demonstrate and teach the process of constructive evaluation of self and others

1.17 Devise, organize, and use evaluation techniques, formats, and processes which insure accountability

1.18 Demonstrate an ability to guide students through theatre arts instruction and activities which promote problem solving, critical thinking, and learning through integration of knowledge

1.19 Demonstrate the ability to utilize one's breadth of knowledge, life experiences, and skills in guiding students in the total theatre experience

1.20 Demonstrate a knowledge and understanding of the basic concepts of technology and their influences and application in theatre arts

Creative Dramatics

2.0 The teacher of theatre arts will possess a thorough working knowledge of the various approaches and strategies to facilitate creative dramatics. Hence, the theatre arts teacher should be able to:

2.1 Demonstrate a knowledge of pantomime, improvisation, poetry and story dramatization, role playing, exploration, sense awareness exercises, characterization, group theatre games, and other widely accepted and age-appropriate creative dramatics techniques and activities

2.2 Demonstrate a knowledge of rhythmic, imitative, and interpretive movement pertaining to creative dramatics

2.3 Be able to identify, locate, and utilize relevant and necessary resources in creative dramatics

2.4 Demonstrate the ability to integrate aspects of other subject areas into creative dramatics

2.5 Demonstrate the ability to devise new or modify existing creative dramatics activities for particular populations and/or needs

2.6 Design and maintain creative dramatics lessons which are balanced between the structured and unstructured but which still allow students to be creative within a discipline structure

Literature and Criticism

3.0 The teacher of theatre arts should understand theatre as a universal form of communication growing out of the human need to express thoughts and feelings and should be able to:

3.1 Display a knowledge of dramatic literature from the classics through contemporary theatre, including selections of multicultural and international literature

3.2 Display a knowledge of basic dramatic theory and criticism from classical through contemporary theatre

3.3 Demonstrate a knowledge of play analysis and dramatic structure

Theatre History

4.0 The theatre arts teacher will have a knowledge of the origins and historical development of theatre and will be able to:

4.1 Demonstrate and articulate a knowledge of the historical development of styles and forms of all aspects of theatre

4.2 Demonstrate and articulate a knowledge of the relationship between theatre and the societies from which it developed

4.3 Demonstrate a basic knowledge of the history and practice of theatre which is multicultural and international

4.4 Demonstrate a knowledge of the people, practices, and trends of historical theatre in all aspects of theatre

Playwriting

5.0 The teacher of theatre arts should understand the basic process of playwriting and script adaptation. Therefore, the theatre arts teacher will:

5.1 Demonstrate a knowledge of dramatic structure

5.2 Demonstrate knowledge of the process of writing for the theatre

5.3 Demonstrate a knowledge of the process of script adaptation and the legalities which may pertain to making adaptations

Acting

6.0 The teacher of theatre arts should possess a knowledge of theatre as a creative and performing art and should be able to:

6.1 Demonstrate a knowledge of creative dramatics as a foundation for the development of acting skills

6.2 Demonstrate a knowledge of acting to include the history and development of acting styles, theories, and techniques

6.3 Demonstrate skills in and understanding of the use of the mind, voice, and body as instruments for dramatic expression

Directing

7.0 The teacher of the theatre arts will possess a knowledge of the directing process, various directing techniques, and the basic skills commonly used in directing theatrical productions. Thus, the theatre arts teacher will be able to:

7.1 Demonstrate the ability to choose appropriate scripts for students and audience

7.2 Adapt non-dramatic material for performance

7.3 Be aware of and understand the ramifications of school, local, and State rules or law relating to censorship of literature and performance

7.4 Demonstrate the ability to analyze a script and develop a director's total concept and style for presentation

7.5 Organize and administer a production schedule which facilitates auditions, rehearsals, production and business deadlines, and performances

7.6 Communicate with technical personnel and coordinate the production design process as it relates to the director's production concept

7.7 Coach students in acting and guide them through the process of comprehending and developing a theatrical role for presentation

Technical Theatre

8.0 The teacher of theatre arts will possess a working knowledge of all aspects of technical theatre within the various limitations of school environments and be able to:

8.1 Display a knowledge of the history and development of the physical theatre, scenery, stagecraft, costuming, lighting, and makeup

8.2 Display a working knowledge of the responsibilities and skills necessary to fulfill the role of stage manager for the entire production process

8.3 Know and understand how to apply the basic concepts of design in the different areas of technical theatre

8.4 Design and execute scenery within a variety of budgets and performance spaces which facilitates the production concept

8.5 Design and execute theatrical lighting in a variety of situations using equipment of varying degrees of complexity

8.6 Design, construct, and/or adapt theatrical costumes within a wide range of budgets which are in keeping with a variety of production styles and concepts

8.7 Design and execute theatrical makeup to include makeup for a variety of theatrical characters which reflect appropriate periods, styles, and performance concepts including masks, hair, and special effects makeup

8.8 Provide ample sound reinforcement and sound effects for a presentation using a variety of techniques and equipment

8.9 Locate or design and build theatrical properties and related special effects items

Theatre Management

9.0 In order to teach and/or implement effective theatre management the teacher of theatre arts will:

- 9.1 Be familiar with and able to locate widely accepted resources such as theatre directories, supply and script catalogues, and theatrical publications which are commonly used in conducting the business and production aspects of a theatre and/or theatre arts program
- 9.3 Know and use the skills necessary to publicize theatre activities
- 9.4 Maintain good school and public relations for the theatre arts program
- 9.5 Know and use basic theatrical business skills to include the development of budgets and procedures for business office, box office, and house management

Professional Values

10.0 In order to promote a theatre arts program which is relevant for the classroom, school, and community, the theatre arts teacher will:

- 10.1 Possess the ability to express the current philosophy of theatre arts education and its role in the total curriculum as stated in the basic education program and North Carolina Standard Course of Study
- 10.2 Understand and be able to develop curriculum and instructional strategies based on the Teacher Handbook for the Competency Based Curriculum
- 10.3 Be aware and use the resources of professional organizations, current research, and publications related to theatre and theatre education
- 10.4 Recognize the value and role of out-of-school productions, workshops, and festivals for students
- 10.5 Recognize the value of and be able to use the community as a resource
- 10.6 Encourage students to participate in a theatre arts program
- 10.7 Create theatre literacy among students and encourage students to become discriminating consumers of theatre
- 10.8 Demonstrate and encourage commitment to the production of quality theatre
- 10.9 Constructively evaluate student work while performing growth and providing positive reinforcement
- 10.10 Recognize the value of the creative process in other areas of learning

10.11 Be aware of the theatre arts teacher's personal liability on the job and be familiar with local, State, and national manuals regarding safety standards and practices

Level II - Computer Competencies – Theatre Arts Education

11.0 All theatre arts teachers should demonstrate an understanding of basic concepts of computer hardware, software, and peripherals in relation to theatre arts education by demonstrating the ability to:

11.1 Exhibit a working knowledge of computer technology

11.2 Set up a computer, including the connection of necessary peripherals

11.3 Exhibit a familiarity with the basic components of a computer system; i.e. input/output, storage, and retrieval

11.4 Perform computer operations: on/off sequence, loading, executing, saving, backing-up of programs

12.0 Theatre arts teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer Managed Instruction (CMI), and authoring programs by:

12.1 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the theatre arts education program (CAI)

12.2 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); e.g., student enrollment, grades, student performance, individualized education programs (IEP), and other classroom-related recordkeeping

12.3 Identifying, evaluating, and selecting software programs appropriate for clerical recordkeeping in the operation of the classroom/facilities/lab; e.g., inventory of consumable and non-consumable supplies, equipment, instruments, and materials; purchase requests; data and statistical analysis

12.4 Being familiar with authoring systems and knowing how to use these specifically designed software programs for instructional purposes, including modifying these programs for instructional use

13.0 The theatre arts teacher should demonstrate an understanding of the use of peripheral devices, both general items and those specific to theatre arts education, by:

13.1 Knowing how to use video technology – videotape recorders/players and laserdisc technology – to enhance theatre arts teaching and learning experiences

13.2 Knowing how to select and use special input and output peripherals for instructional and management purposes

13.3 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the ongoing status of electronic instructional technology

14.0 The theatre arts teacher should demonstrate the understanding and use of electronic instructional technology for content specific activities by:

14.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: lighting boards; graphic tablets; electronic stage, lighting, and sound design devices

14.2 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated theatre staging and choreography

ADVANCED LEVEL THEATRE ARTS CERTIFICATION

The program for each candidate should be planned in a logically-organized whole, in continuation of the previous study and in relation to the enhancement of professional educational theatre arts expertise for preparation to instruction at the K-12 level. A minimum of 60 percent of the graduate work should be the discipline of the teacher's subject or academic field, and a minimum of 20 percent should be free for additional work into the subject field, in professional education, or for any graduate work that would add to the general competency of the individual.

The master's degree program in theatre arts should be planned so that it meets the following guidelines:

GUIDELINE 1: The program should provide for concentrated study in theatre arts education for grades K-12.

GUIDELINE 2: The program shall extend the teacher's understanding of the basic humanistic and behavioral studies related to the teaching and learning of theatre arts.

GUIDELINE 3: The program shall broaden and deepen the understanding of teaching and learning theory as it applies to theatre arts through advanced study accompanied by appropriate clinical experiences.

Preparation under this guideline should include advanced study in the body of knowledge dealing with teaching and learning theory applicable to theatre arts education K-12. The study and practical experiences should enable the teacher to understand the theoretical principles that explain accepted professional practices and extend the ability to make practical applications. While this does not necessarily imply the traditional student-teaching experiences, there should be evidence of field-based research or special projects which provide for appropriate involvement in this area.

GUIDELINE 4: The program shall assist the teacher in gaining greater insights and skills in the use of techniques of research and in designing and implementing research projects in theatre arts education, K-12.

Emphasis in this area should be on the study of research methods and findings, and on giving the teacher the necessary understanding and skills to develop action research in classroom situations and to extend the ability to utilize information from research reports in improving learning situations.

COMPLETION OF PROGRAM

The fifth-year program should normally lead to the master's degree. When a sixth year or beyond is involved, the institution should grant appropriate recognition for completion of the program.

RECOMMENDATION OF INSTITUTION

Each candidate for a certificate must be recommended by the appropriate college officials. The recommendation must certify the completion of a master's degree level, sixth-year level, or doctoral-level program and must be accompanied by supporting transcript(s) or credit(s).

Revised 12/89

SPEECH COMMUNICATION: GRADES K-12

A. The Purpose of Speech Communication in the School Curriculum

Consistent with the general purposes of cultural arts education, speech communication exists in the schools to:

- Provide opportunities for students to discover alternate means of communication through creative speech
- Help students develop talents they have for expressing themselves through speech
- Encourage students to use these talents creatively
- Lead students to an understanding of the universality of symbolic oral communication
- Assist students with special talent and interest to prepare for further education and careers in speech and related areas

B. Guidelines for the Preparation of Speech Communication Teachers

In the preparation of speech communication teachers, a minimum of 25 percent of the undergraduate program should be devoted to speech communications in accordance with the following guidelines:

GUIDELINE 1: The program should provide a knowledge of and skill in the traditional performance areas of speech.

This study should include the fundamentals of speech communications, the oral interpretation of literature, group discussion, debate, public speaking, parliamentary procedures, and similar disciplines.

GUIDELINE 2: The program should introduce the student to the area of interpersonal communication theory.

The program should provide the prospective teacher a knowledge of those courses which stress speech communication theory, including such fields as the history of communication, the psychological aspects of communication, the human dynamics of communication, and similar disciplines.

The program should include at least one field experience in which the prospective teacher attempts to apply the knowledge learned in the above areas.

GUIDELINE 3: The program should introduce the student to basic problems of speech and the theory of speech correction.

This program should provide the prospective teacher with sufficient knowledge to recognize common speech handicaps among children and to evaluate the needs of special therapy. The speech communication teacher should be able to help classroom teachers create attitudes and environments which will help handicapped students maintain progress in the correction of speech defects. The clinical aspect of speech correction is, however, the province of the speech therapist.

GUIDELINE 4: The program should introduce the student to the basic knowledge of the theatre arts.

This study should include opportunities to learn about and practice acting, directing, and general play production. It should develop in the teacher the ability to help children use drama as a form of communication within the classroom and in special creative theatrical productions.

GUIDELINE 5: The program should establish an awareness of general school activity and the part that speech communication can play in enlarging learning throughout the school spectrum.

The prospective teacher should be able to develop speech programs and activities which support the general educational efforts of the schools. Consideration must be given to the variety of activities appropriate for children of various ages.

GUIDELINE 6: The program should include sufficient preparation for the later pursuit of graduate work in one or more of the specialized fields within speech communication.

GUIDELINE 7: The program should develop the capacity and the disposition for continued learning in the field of speech.

The program should develop in the student the habits and attitudes necessary for continued learning both formal and informal. New developments and the rapid pace of change requires that teachers upgrade their professional capability on a continuing basis, using such mediums as in-service education, individual study, and formal graduate study.

C. The Competencies Needed by Teachers of Speech Communication

The teacher's competence should be at the level necessary to meet the learning needs of children and youth and to provide the background for further educational development. The competence level of the teacher in various areas is characterized as described below:

1.0 Speech Communication, Knowledge and Skill

  1.1 Understanding of how oral communication contributes to the aesthetic, social, and logical fulfillment of society in general and of the child in particular

  1.2 Ability to demonstrate and to teach the oral interpretation of literature

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1.3 Ability to demonstrate and to teach the art of oral discourse, including argumentative, persuasive, and interpersonal communication

1.4 Ability to demonstrate and to teach how the human voice interacts with communication, including knowledge of pronunciation, social dialects, voice production, and oral vocabulary development

1.5 Working knowledge of theatrical and radio or television production, with emphasis on creative drama

1.6 Ability to recognize common speech pathologies and to make referrals to specialists

2.0 Professional Competencies

2.1 Ability to express a philosophy of speech communication and education

2.2 Knowledge of how people learn and ability to adapt this knowledge in the teaching of speech communication

2.3 Familiarity with current media and patterns of instructional organization

2.4 Understanding of the need for dedication to teaching and to the need to continue learning

2.5 Perception of speech communication as a totality within and related to the whole curriculum

2.6 Recognition of the value of out-of-school speech communication experiences

2.7 Understanding of the individual needs of learners

3.0 Personal Attitudinal Competencies

3.1 Ability to inspire students to participate in a diversified program of speech communication

3.2 Ability to relate well to individual and society

3.3 Ability to relate well to other arts and disciplines

3.4 Ability to make creative use of the imagination

3.5 Ability to put students needs ahead of one's own

SECOND LANGUAGE STUDIES
MODERN FOREIGN LANGUAGES
(French, German, Spanish)

A. Purpose and Nature of Modern Foreign Language Studies in the K-12 School Curriculum

The purpose of a program in second language studies in North Carolina is to introduce students to the life, literature, and culture of other lands, to prepare some for research in foreign language sources at higher levels of education, to prepare others to aid in the State's economic and cultural growth--particularly in dealing with the international business, educational, and scientific communities--and to make available to all children an opportunity to sense and feel the spirit of expressions foreign to our own. In order to succeed in these arenas, North Carolinians must be able to: (1) use language and behavior that conform to the proprieties and sensibilities of other cultures; (2) recognize commonalities and accept differences among cultures, peoples, and languages; and (3) appreciate the contributions of other cultures to our nation, state, and communities. To accomplish these ends, the citizens of this State must be proficient in at least one second language.

The overall goal of second language study is proficiency. Proficiency is the ability to communicate directly and effectively with people from other cultures. Contact with other cultures is a reality in North Carolina: activity in foreign investment and international trade is increasing annually, and the number of immigrants, settling in more and more communities in this State, is growing steadily. Therefore, the program prepares students to communicate directly and productively with people who have been brought together by international trade, technological advances, and common needs.

The immediate objective of this proficiency-based program of second language study is the progressive development of the skills of listening, speaking, reading, and writing. Correspondingly, the language learning process involves mastery of grammar and vocabulary. Finally, the study of culture is incorporated throughout the language learning process. This entails learning about the ways in which people live on a day-to-day basis as well as about their contributions to our nation, State, and communities.

The developmental nature of second language learning requires a long, unbroken sequence that permits pupils to develop proficiency in as natural a manner as they acquired proficiency in their first language. Language learning and use must correspond to concepts that students have mastered and to experiences they have had, both in and out of school, throughout the entire K-12 curriculum.

If students are to attain the competency objectives that are listed in the Standard Course of Study and Teacher Handbook for Second Language Studies, K-12, it will be necessary for Teacher Training Programs to ensure that initially-certified second language teachers have the proper preparation for teaching pupils at all levels of the K-12 curriculum. The K-12 teacher guidelines and competencies for teacher preparation programs follow in Sections B and C, respectively.

B. Guidelines for the Preparation of Second Language Teachers, K-12

Training programs for certification in second language studies should lead to the acquisition and maintenance of knowledge and skills in the following areas: linguistics; language acquisition; child development; psychology of language learning; language and culture; methodology in second language and second language in the content areas; the relationship between the State Second Language Studies Curriculum and the Basic Education Program; the relationship between the K-12 second language curriculum and the school curriculum at all grade levels; and the historical and legislative background of second language education in the United States and in North Carolina.

Furthermore, in order to prepare future second language teachers to address questions of diagnosis, placement, grading, and promotion and retention, programs should provide training in the selection and use of techniques and materials for teaching and assessing pupils of varied cultural, socio-economic, linguistic, and educational backgrounds. Likewise, in order to provide to candidates of varied backgrounds and abilities the opportunity to achieve the competencies needed, the program should include preparation through courses, independent study, extracurricular activities, and opportunities for study abroad.

Teacher preparation in second language studies should foster commitment to the need for cooperation with all content areas teachers, willingness to undergo training in new techniques and innovative strategies, and ability to find creative ways in which to teach all children of varied backgrounds and abilities.

Finally, admission into the teacher education program should include assessment of second language proficiency, as well as recommendations by staff members of the department of second languages.

Therefore, the program should be planned in accordance with the following guidelines:

GUIDELINE 1: The program should ensure that prospective second language teachers have proficiency in four skills: listening, speaking, reading, and writing.

All second language skills should be stressed continuously throughout the training period; preparation in the active use of the language is essential; therefore, special conversation-composition preparation is necessary. Deficiencies should be identified at the beginning of the training program AND APPROPRIATE REMEDIATION PRESCRIBED. Instruction should include activities in listening to a second language for factual and implied information; speaking with sufficient proficiency to express both concrete and abstract ideas, using the speech patterns of a second language role model; reading with comprehension on the literal, interpretive, and critical levels; and writing clearly and effectively at a level appropriate to different purposes and audiences such as children, colleagues, close friends, and business leaders.

In addition, the instruction should include regular and extensive exposure to several varieties of native speech through teachers, lecturers, native informants, or mechanically reproduced speech, as well as exposure to several varieties of the written language through media such as books, newspapers, magazines, and documents.

GUIDELINE 2: The program should include an analysis of the linguistic components of the second language.

Preparation in this area should emphasize the study of the phonological, morphological, syntactic, and semantic systems of the second language, and comparison of these systems with those of American English. Candidates in the program should have some preparation in applied linguistics and should develop the ability to apply linguistic principles and techniques to the teaching and learning of a second language at all grade levels, K-12. Instruction in practical/corrective phonetics should be available for those candidates needing to improve the accuracy of their own pronunciation and intonation.

GUIDELINE 3: The program should include a study of the literature, history, and civilization of the country or countries concerned.

This study should involve the major works of the literature and other aspects of the culture and civilization, including aspects of history, geography, fine arts, and contemporary civilization, as well as the life of young people today. The study should be in the second language.

GUIDELINE 4: The program should include instruction in methods, materials and equipment, and testing and assessment related to the teaching of the second language and its corresponding culture.

Preparation should include instruction in current theory and practices of teaching a second language, including the use of instructional materials, media and technology; appropriate evaluative instruments and procedures for measuring second language proficiency and achievement; and effective classroom methods and techniques, as well as knowledge of the relationships between language and culture.

In addition, the preparation should lead candidates to develop usable knowledge of the ways in which children, young adolescents, adolescents, and adults learn first and second languages. The program should also prepare candidates to understand the relationship between second language study and other areas of the curriculum at all grade levels.

The program should introduce candidates to sources of current information and research in the field. The preparing institution should maintain a curriculum library containing the materials and equipment commonly used in teaching second languages; provide opportunities for reinforcement of classroom learning through language laboratory, foreign films, plays, and lectures; and provide language reading and listening rooms with books, periodicals, records, and tapes.

GUIDELINE 5: The program should include a comparative study of the target language and culture and of English and the American culture.

Preparations should include a comparison of distinctive elements of the second language with elements of the English language in order to facilitate learning another language. In addition, the program should include a comparative study of major aspects of the target culture and of the American culture.

GUIDELINE 6: The program should include a study of language acquisition.

Preparation in this area should include the study of the processes of first and second language acquisition, and should include an analysis of the relationship between these two processes. Instruction should include a knowledge of the major contributions of leaders in the field of psycholinguistics; application of language learning theory to practical teaching strategies; and understanding of the ways in which children, young adolescents, adolescents, and adults learn first and second languages. Preparation should include application of principles of child development.

GUIDELINE 7: The program should include a study of the legislative and historical background of education for students of second language in the United States and in North Carolina.

Preparation should include study of the historical, legislative, and educational foundations of programs for students in second language studies, K-12. A study of the rationale for second languages at the elementary school level should be part of the program as well as rationale for a K-12 sequence and implications for teachers and school units.

GUIDELINE 8: The program should develop an awareness of the need for continuing education and professional development.

Prospective teachers should be informed about opportunities which are available through related organizations, programs, and resource materials and persons at local, State, and national levels. They should be encouraged to continue their education through in-service workshops, graduate work, participation in professional organizations, individual study, and travel/study programs abroad.

GUIDELINE 9: The program should include a study of the State second language curriculum and how it fits into the public school curriculum at all grade levels.

Preparation should include participation in analysis and evaluation of the State second language curriculum and local school systems' curriculum guides, as well as the development of a methods class curriculum project. Analysis of the State second language curriculum should be made in terms of the extent to which it supports the full Basic Education Program and how it fits into the public school curriculum at all grade levels, especially at the elementary grades.

C. Competencies for the Preparation of Second Language Teachers

Academic Skills and Knowledge–For the Initially Certified Teacher

1.0 Listen with comprehension to the second language at a rate considered average for an educated native speaker

- 1.1 Listen to conventional questions and respond appropriately either in writing (to a questionnaire) or orally (to an examiner or a tape)
- 1.2 Listen to a five-minute taped newscast or other factual statement (taking notes, if desired) and summarize and paraphrase what was heard
- 1.3 Listen to a taped dialogue or narrative and respond appropriately to intonational differences that affect meaning
- 1.4 Listen to a short series of passages and indicate the common thematic element

1.5 Listen to a non-culture bound anecdote, and respond appropriately

2.0 Speak the second language with sufficient proficiency in vocabulary and syntax to express both abstract and concrete thoughts at normal speed with pronunciation, stress, rhythm, and intonation commensurate with the teacher's role as a second language model

2.1 Respond orally to factual, inferential, and evaluative questions

2.2 View a filmstrip once with sound; then with sound turned off, supply an oral narration

2.3 View a dramatization of a children's story, a silent film or pantomime, and retell it in own words in the second language

2.4 With one or more speakers of native or near-native proficiency, engage in a conversation centered around everyday-life situations

2.5 Complete a series of oral presentations, using styles and levels of language appropriate to different audiences (e.g. children, friends, colleagues, general public), employing correct grammar and usage

3.0 Read with comprehension general printed matter on the literal, interpretive, and critical levels

3.1 Demonstrate comprehension of a selected passage by answering questions based on its literal meaning

3.2 Read a short series of passages and identify the common thematic element

3.3 Recognize and interpret denotative, connotative, figurative, and idiomatic meaning of written expression in context

3.4 Recognize and analyze organizational patterns and stylistic devices within written material

3.5 Rephrase, restate, critique, and/or make personal application of material read

4.0 Write clearly, correctly, and effectively in the second language

4.1 Write a unified and coherent composition employing correct vocabulary, sentence structure, spelling, grammar, and punctuation

4.2 Complete a series of writing assignments for varied purposes (for example: to inform, convince, describe, or entertain)

4.3 Complete a series of writing assignments employing styles and levels of language appropriate to different audiences (for example: children, close friends, general public, colleagues, or professional publications)

4.4 Read a literary selection and write a synopsis using correct structure, spelling, and punctuation

4.5 Read a newspaper/magazine article and write a synopsis/paraphrase using correct structure, spelling, and punctuation

5.0 Demonstrate the ability to recognize and reproduce the linguistic components of the second language

5.1 Distinguish and reproduce all phonemes

5.2 Listen to a prepared tape of a native second language speaker and identify and analyze stress, tonality, rhythm, and juncture

5.3 Analyze a set of written second language sentences for the following morphological and syntactic components: inflectional/derivational affixes, parts of speech, and sentence patterns

6.0 Demonstrate a general knowledge of the distinctive features of the second language in comparison with English

6.1 Compare the syntactic features of the second language with English

6.2 Compare the morphological features of the second language with English

6.3 Compare the phonological features of the second language with English

6.4 Compare and contrast vocabulary and structural elements of the language with those of English

6.5 Describe the positioning of the various speech organs in order to make sounds which occur in the second language

7.0 Demonstrate a general knowledge of the literature, history, geography, national festivities, lifestyles, verbal and non-verbal behaviors, social customs, and traditions and achievements of countries and areas where the language is spoken

7.1 Locate on blank maps countries and areas around the world in which the language is spoken

7.2 Fill in the major geographical features of the countries and areas where the language is spoken, when given blank maps

7.3 Designate in writing the salient historical events and personal achievements pertaining to representative countries and areas where the language is spoken

7.4 Trace major literary periods/movements in chronological order, being able to expound on at least one author representative of each period/movement

7.5 Describe and give the significance of major national festivities and religious holidays of countries or areas where the language is spoken

7.6 Illustrate specific non-linguistic elements of communication such as gestures, proxemics, and kinesics

7.7 Select at least five areas of cross-cultural contrast/conflict and substantiate in writing the underlying concepts of each, being sure to include at least three of the following: attitude toward time, toward work/leisure, toward family, kinesics, space, and orientation toward persons

7.8 Use artistic, musical, dramatic, or literary materials to illustrate behavioral patterns of the target culture

7.9 Select two works of literature, music, art, dance, drama, or cinema, one from the American culture and one from the target culture, and explain how they illustrate differing attitudes; for example: time, social relationships, rituals

7.10 Research and report on educational systems and expected classroom behaviors and attitudes of countries and areas where the language is spoken

Professional Skills and Knowledge--For the Initially Certified Teacher

8.0 Identify and discuss the ways in which children, young adolescents, adolescents, and adults learn and acquire first and second language

8.1 Cite the major contribution(s) of leaders in the field of the psychology of language learning

8.2 Describe the relationship between the processes in first and second language acquisition

8.3 Compare and contrast the ways in which children, young adolescents, adolescents, and adults learn a second language

8.4 Describe the compare at least three different individual styles of learning

8.5 Experience the process of learning a new language or culture through an immersion experience, a language class, or a simulation game

9.0 Identify and discuss major methodologies and current trends in K-12 second language teaching

9.1 Cite and discuss the contributions of leaders in the field of second language education

9.2 State the major theoretical base for each methodology and explain how each can be applied to an eclectic approach

9.3 State the major advantages, disadvantages, and the desired outcomes of each methodology

9.4 Categorize various techniques under the appropriate methodology

10.0 Employ major techniques and strategies for teaching listening, speaking, reading, writing, and culture in K-12 second language studies at various grade levels

10.1 Plan and teach sequential activities which develop students' listening comprehension

10.2 Plan and demonstrate exercises and drills for learners to acquire standard pronunciation and intonation

10.3 Demonstrate techniques to teach speaking from structured to spontaneous self-expression

10.4 Demonstrate various strategies to teach reading comprehension and literature. This includes choosing both literature and other reading materials appropriate for the proficiency and age level

10.5 Develop activities to teach writing as a process, progressing from reinforcement of the spoken word through transcription and guided composition to autonomous expression

10.6 Choose and teach exercises and drills that develop the ability to use the structure and vocabulary of the second language

10.7 Plan and demonstrate activities for teaching aspects of the target culture (daily life, historical and geographical factors, etc.). Suggested techniques include mini-drama, culture capsule, culture assimilator, audio-motor unit, and role-plays

11.0 Demonstrate the ability to select, adapt, and develop appropriate instructional materials for use in K-12 second language instruction

11.1 Review different types of commercially-developed material (audio-visual materials and equipment, broadcast and print media, and technology). Evaluate each for student appeal, level of difficulty, cultural content, instructional validity, and second language proficiency level

11.2 Create an original teaching device

11.3 Identify, evaluate, and select computer software programs appropriate for instructional purposes in second languages

12.0 Demonstrate knowledge of K-12 second language evaluative instruments and techniques

12.1 Evaluate standardized and teacher-made instruments, activities, and procedures designed to measure proficiency and achievement in listening, speaking, reading, or writing to determine the following: the target group to be tested, the strength and limitations of the instrument, the skills tested, and ways to use test results

12.2 Identify potential linguistic and/or cultural biases in evaluative instruments

12.3 Develop and/or administer a formal or informal language placement test and evaluate the results

12.4 Develop evaluative classroom instruments appropriate to the competencies taught at each level to measure student progress in listening, speaking, reading and writing

13.0 Understand the history and legislation for K-12 second language education in the United States and in North Carolina

13.1 State the chronological events leading to legislation which has affected education for all public school second language learners in North Carolina

13.2 Outline the development of legislation which has influenced the education of second language learners in North Carolina

13.3 State how pertinent legislation has affected education programs for second language learners, identifying types of programs, settings appropriate for each type, and factors influencing program design

13.4 Trace the historical background of Second Language Education in the United States

14.0 Participate in curriculum development

14.1 Analyze second language and content area curricula in light of student age, background, proficiency levels and academic progress

14.2 Design, adapt, and/or revise instructional objectives and activities to accommodate the needs of the students to be served

14.3 Understand the State Second Language Curriculum and how it fits into and supports the Basic Education Program and the school curriculum at all grade levels

15.0 Demonstrate the ability to organize an effective K-12 second language instructional environment

15.1 Create a learning-conducive environment which includes consideration for the emotional, intellectual, and physical needs of the K-12 student

15.2 Demonstrate the ability to develop second language instructional objectives to integrate language and cultural learning with the content areas of the K-12 school curriculum as well as through extra-curricular and community activities

15.3 Demonstrate the ability to assess, personalize, diagnose, and respond to individual learner needs (learning styles), including the needs of exceptional children

15.4 Demonstrate the ability to conduct classroom activities exclusively in the second language

15.5 Demonstrate the ability to model language through verbal and non-verbal methods and techniques

15.6 Demonstrate the ability to differentiate between major and minor errors and how and when to make corrections, provide feedback, and allow for delayed response

15.7 Prepare lessons that incorporate a variety of oral and written activities for individuals, small groups, and entire classes

Professional Growth

16.0 Keep abreast of current trends, issues, and research in K-12 second language curriculum, instruction, and theory of language acquisition relevant to students in the United States and in North Carolina

16.1 Research and discuss the evolving administrative, educational, and legal aspects involved in planning, implementing, and evaluating a second language program

16.2 Understand the benefits and implications of the implementation of a sequential study of second languages

16.3 Be familiar with current printed and non-printed texts and materials relating to second language teaching, including videotapes and computer software, and know how these materials can be obtained

17.0 Keep the four language skills actively in use

17.1 Participate in local conversation groups and annual foreign language weekends and institutes

17.2 Read independently a variety of materials in the second language (for example: newspapers, magazines, literary works) as well as classroom-related materials

17.3 View or listen to second language transmissions in available media (for example: public television, films and videos, short wave radio broadcasts, and programs received via satellite)

17.4 Devise strategies to write in the second language, particularly ways of developing curriculum appropriate to the levels taught

17.5 Travel to countries of the target culture, whenever possible

18.0 Keep foreign language teaching skills actively in use

  18.1 Be aware of changes in language teaching being implemented in North Carolina school districts and prepare to adapt to those changes

  18.2 Visit other foreign language classes and teachers to observe and assimilate new ideas on foreign language teaching

  18.3 Read current professional journals such as Foreign Language Annals, Modern Language Journal and ACTFL Foreign Language Educational Series

19.0 Continue academic development

  19.1 Enroll in graduate-level language/literature courses, especially those stressing oral language (conversational) development

  19.2 Study abroad in countries of the target culture, whenever possible

  19.3 Engage in activities to enrich knowledge and understanding of the civilization and culture relating to the countries where the second language is spoken

  19.4 Keep abreast of important political and cultural events in the countries where the second language is spoken

  19.5 Pursue graduate studies in the second language

20.0 Continue professional development

  20.1 Enroll in graduate methods courses/seminars

  20.2 Attend and participate in professional meetings and conferences at local, State, and/or national levels

21.0 Know availability and location of resources

  21.1 List the names of individuals and agencies in the local community and at large who are available as resource persons in second language education

  21.2 List the names and addresses of materials sources such as clearinghouses and second language programs within the State and across the nation

22.0 Promote cooperation among second language staffs, classroom teachers, school administrators, college and university personnel, and members of the community

  22.1 Meet with content-area teachers and share materials, techniques, and strategies

  22.2 Work with paraprofessionals (aides, tutors, parents, native language associates) and volunteers in selecting and using appropriate methods and materials

22.3 Communicate periodically with parents and school administrators about program goals and student progress

22.4 Encourage positive interaction among various cultures in the community through multicultural events

22.5 Know of, and work with, the collaboratives (the cooperative effort between local schools and colleges and universities)

Revised 9/88

ENGLISH AS A SECOND LANGUAGE: Grades K-12

A. Purpose and Nature of English as a Second Language Study in the K-12 Curriculum

It is important for the community and for all administrators, educators, and support personnel at all levels to realize that for millions of children in the public schools of our country, and for thousands in the schools of our State, English is a foreign language. Since English is the sole medium of instruction in this State's public school system, it is easy to overlook the possibility that our language can be an impediment to learning for students who represent many other languages and cultures. Rather than being a conveyor of information, English can be a barrier for pupils who need to survive both in and out of school. A formal program of English as a Second Language is essential to the cultural, social, psychological, educational, and economic survival of immigrant children and their families.

It is the major purpose of English as a Second Language study to provide to students of other languages and cultures equal access to and full participation in the total curriculum. This major purpose will be accomplished by developing in language-minority students the ability to understand, speak, read, and write English, thus preparing them to function on an academic par with their American peers in all content areas. Additional aims of the program include:

- providing opportunities for immigrant children to experience effective communication with teachers, administrators, students, and support personnel
- preventing potential below-grade achievement and drop-out activity, because of language
- promoting in refugee and other immigrant children a positive esteem for themselves and for their languages and cultures

The steady influx of refugee and other immigrant children into the majority of the school systems in this State brings a new challenge to American educators, administrators, support personnel, students, and parents. The challenge of educating these children is great in that they bring a new dimension to education by expanding the definition of communication through new languages and cultures. A formal program of English as a Second Language can become the vehicle by which immigrants and Americans together can stretch the concept of literacy beyond its generally acceptable definition.

Therefore, it is the overall aim of instruction in English as a Second Language to provide for newly-arriving foreign students the opportunity to become American-literate citizens who can function in and contribute to their schools and communities, and to Americans the opportunity to become internationally-literate citizens: this strengthens American public school philosophy, as it is presently known.

B. Guidelines for the Preparation of English as a Second Language Teacher

Training programs for certification in English as a Second Language should lead to the acquisition and maintenance of knowledge and skills in the following areas: English; linguistics; language acquisition; psychology of language learning; culture; method and trends; historical and legal background of English as a Second Language in the content areas; and curriculum evaluation.

In addition, appropriate training in the selection and use of techniques and materials for teaching and testing pupils of varied cultural, linguistic, and educational backgrounds will prepare future teachers in this area to deal effectively with questions of diagnosis, placement, grading, and promotion and retention.

Finally, teacher preparation in English as a Second Language should foster commitment to the need for cooperating with all content area teachers, willingness to undergo training in new techniques and innovative strategies, and ability to find creative ways by which to involve immigrant children with their American peers in curricular and co-curricular activities.

Therefore, the program should be planned in accordance with the following guidelines:

GUIDELINE 1: The program should ensure that prospective ESL teachers have competency in the four skills of English - listening, speaking, reading, and writing.

All English language skills should be stressed continuously throughout the training period; preparation in the active use of the language is essential. Deficiencies should be identified at the beginning of the training program and appropriate remediation prescribed. Remedial instruction should include activities in listening to English for factual and implied information; speaking with sufficient proficiency to express both concrete and abstract ideas using speech patterns of an English model; reading with comprehension on the literal, interpretive, and critical levels; and writing clearly and effectively at a level appropriate to different purposes.

GUIDELINE 2: The program should include an analysis of the linguistic components of English.

Preparation in this area should emphasize the study of the phonological, morphological, syntactic and semantic systems of English. The program should develop the ability to apply linguistic principles and techniques to the teaching and learning of a second language.

GUIDELINE 3: The program should include instruction in methods, materials, testing, and assessment related to the teaching of ESL and American culture.

Preparation should include instruction in current theory and practices of teaching English as a Second Language, including use of instructional media, appropriate evaluative instruments for measuring English proficiency, effective classroom methods and techniques in English as a Second Language, and the relationship between language and culture. The program should enable students to use materials and equipment, and it should introduce students to major sources of current information and research in the field.

GUIDELINE 4: The program should include a comparative study of major world languages and cultures.

Preparation should include a comparison of distinctive elements in English language and culture with other languages and cultures in order to facilitate learning a second language. The program should include a comparative study of the major aspects of American and other cultures.

GUIDELINE 5: The program should include a study of language acquisition.

Preparation in this area should include the study of the processes of first and second language acquisition and should include an analysis of the relationship between these two processes. Instruction should include a knowledge of the major contribution of leaders in the field of psycholinguistics.

GUIDELINE 6: The program should provide the opportunity for experiencing the process of learning a second language.

The program should provide the opportunity for experiencing the process of learning a second language. Preparation in this area should include one or more of the following experiences:

- formal classroom instruction
- intensive language workshops
- travel/study abroad supported by a detailed account of experiences with the foreign languages

C. Competencies Needed by Teachers to Achieve Program Objectives

Academic Skills and Knowledge

1.0 Listen with comprehension to spoken English at a rate considered average for a native speaker

  1.1 Listen to conventional questions and respond appropriately either in writing (to a questionnaire) or orally (to an examiner or on a tape)

  1.2 Listen to taped segments of heavily accented and/or "broken" English and give an oral or written general summary

  1.3 Listen to a five-minute taped newscast or other factual statement (taking notes, if desired) and summarize what was heard

  1.4 Listen to a taped dialogue or narrative and interpret intonational implications

2.0 Speak English with sufficient proficiency in vocabulary and syntax to express both abstract and concrete thoughts at normal speed with pronunciation, stress, rhythm, and intonation commensurate with the teacher's role as English language model

  2.1 Respond orally to factual, inferential, and evaluative questions

  2.2 View a silent filmstrip or pantomime; then supply an oral narration

  2.3 Record an impromptu oral essay employing correct grammar and usage

3.0 Read with comprehension general printed matter on the literal, interpretive, and critical levels

- 3.1 Demonstrate comprehension of a selected passage by answering questions based on its literal meaning
- 3.2 Read a short series of passages and identify the common thematic element
- 3.3 Recognize and infer denotative, connotative, figurative, and idiomatic meaning of a written expression in context
- 3.4 Recognize and analyze organizational patterns and stylistic devices within written material

4.0 Write English clearly, correctly, and effectively at a level appropriate to the purpose

- 4.1 Write a unified and coherent composition employing correct spelling, grammar, and punctuation
- 4.2 Complete a series of writing assignments for specific purposes (for example: to inform, convince, describe, or entertain)
- 4.3 Complete a series of writing assignments employing styles and levels of language appropriate to different audiences (for example: children, close friends, general public, colleagues, or professional publications)
- 4.4 Express humor or creativity in a free-form piece of writing

5.0 Demonstrate the ability to analyze the linguistic components of English

- 5.1 Listen to a reading of minimal pairs and distinguish phonemes
- 5.2 Listen to a prepared tape of a native English speaker and identify and analyze stress, tonality, rhythm, and juncture
- 5.3 Listen to a prepared tape of a non-native English speaker and identify inappropriate deviations in stress, tonality, rhythm, juncture, and pronunciation
- 5.4 Analyze a set of written English sentences for the following morphological and syntactic components: inflectional/derivational affixes, parts of speech, and sentence patterns

6.0 Demonstrate a general knowledge of the distinctive features of major world language groups in comparison with English

- 6.1 Select three major languages, each from a different language typology, and compare four principles, syntactic, or morphological features with those of American English (for example: preposition, pronouns, articles, inflectional endings, word order)

6.2 Select three languages other than English, each from a different language typology, and list those phonological features which appear in English and those which do not

6.3 Select two language typology, and list those suprasegmental patterns which appear in English and those which do not

7.0 Know the ways in which children, adolescents, and adults learn language

7.1 List the major contribution(s) of leaders in the field of the psychology of language learning

7.2 Describe the relationship between the processes in first and second language acquisition

7.3 Compare and contrast the way in which children, adolescents, and adults learn a language

8.0 Demonstrate a knowledge of the emotional, psychological, and intellectual implications of the process of learning a second language

8.1 Experience the process of learning a second language through such means as formal classroom instruction, intensive language workshops, or independent study

8.2 Describe the process (personally experienced) of learning a second language

8.3 Analyze the emotional, psychological, and intellectual responses to a personal language learning experience, indicating what facilitated and inhibited learning

9.0 Demonstrate a general knowledge of distinctive elements of our American culture and other major world cultures, including verbal and non-verbal behavior, customs, traditions, thought processes, and values as manifestations of cultural differences

9.1 Illustrate behavioral patterns of a particular culture in a given daily situation through an artistic, musical, dramatic, or literary presentation

9.2 Select two works of literature, music, art, dance, or drama, one from the American culture and one from another culture, and explain how they illustrate differing attitudes; for example: time, social relationships, rituals, etc.

9.3 Research and report on educational systems and expected classroom behaviors and attitudes of three countries selected from different continents

Professional Skills and Knowledge

10.0 Know major methodologies and current trends in ESL teaching (for example: audio-lingual, direct, situation-reinforcement)

10.1 State the major theoretical basis for each methodology

10.2 State the major advantages and disadvantages of each methodology

10.3 List the names and contributions of the major leaders in the field of ESL methodology

11.0 Employ major techniques and strategies for teaching listening, speaking, reading, writing, and culture in ESL at various grade levels

11.1 Categorize various techniques under the appropriate methodology

11.2 Prepare and micro-teach at least one lesson from each methodology

11.3 Describe how the different ways in which children, adolescents, and adults learn a language will affect teaching methodology and strategies

11.4 Prepare and demonstrate an ESL mini-lesson for three different levels of language proficiency at three different age levels (i.e., early childhood, intermediate, and secondary)

11.5 Design three activities for teaching aspects of American culture

12.0 Demonstrate the ability to select, adapt, and develop appropriate instructional materials for use in ESL from all media: texts, films, audio-tapes, video-tapes, records, slides, and programmed materials

12.1 Review five pieces of commercially developed materials and evaluate each from the standpoint of student appeal, level of difficulty, cultural content, and instructional validity

12.2 Select one piece of instructional material and adapt it linguistically and culturally for ESL students on three language proficiency levels

12.3 Make an original creative teaching device

13.0 Demonstrate knowledge of ESL evaluative instruments and techniques

13.1 Evaluate instruments designed to measure ESL proficiency in listening, speaking, reading or writing to determine the following: the target group to be tested, the strengths and limitations of the instrument, the skills tested, and ways to use test results

13.2 Identify potential linguistic and/or cultural biases in evaluative instruments

13.3 Develop, administer, and evaluate the results of an oral language placement test

13.4 Develop evaluative classroom instruments to measure student progress in listening, speaking, reading, and writing

14.0 Understand the historical and legal background of education for non-English speaking students in the United States

14.1 State the chronological events leading to legislation which has affected education for non-English speakers

14.2 Outline the development of legislation which has influenced the education of non-English speaking students

14.3 State how pertinent legislation has affected educational programs for non-English speakers identifying types of programs, settings appropriate for each type, and factors influencing program design

14.4 Discuss the sociological and political issues surrounding national origin, minority students, and Bilingual Education/ESL

Professional Growth

15.0 Know current trends, issues, and research in ESL curriculum, instruction, and language acquisition relevant to students in the United States

15.1 Research and discuss the evolving administrative, educational, and legal aspects involved in planning an ESL or bilingual program

15.2 Understand the linguistic and cultural implications surrounding the implementation of an ESL or Bilingual program

16.0 Know availability and location of resources

16.1 List the names of individuals and agencies in the local community who can assist as interpreters and legal or educational consultants

16.2 List the names and addresses of the offices or people dealing with visas, health records, immunizations, transcripts, and transportation

16.3 List the names and addresses of material sources such as clearinghouse, Title VII programs, and ESL/bilingual programs within the state

17.0 Promote cooperation among bilingual/ESL staff, classroom teachers, school administrators, and members of the community

17.1 Meet with content-area teachers and share materials, techniques, and strategies

17.2 Work with para-professional (aides, tutors, native language associates) and volunteers in selecting and using appropriate methods and materials

17.3 Communicate periodically with parents, sponsors, and school administrators about program goals and student progress

17.4 Encourage positive interaction among various cultures in the community through multi-cultural events

18.0 Participate in curriculum evaluation and development

18.1 Analyze ESL and content area curriculum in light of student age, background, proficiency levels, and academic progress

18.2 Design, adapt, and/or revise instructional objectives and activities to accommodate the needs of the students to be served

READING: GRADES K-12

A. Purpose and Nature of Reading in the School Curriculum

Reading is defined as the active process of reconstructing meaning from the language represented by graphic symbols. The goals of the reading program are, first, to equip students with the skills necessary for reading and understanding written materials, and, second, to develop in students the inclination and desire to read. Since man is born into a culture that has as one of its principal functions the conservation and transmission of past learning and, since the written word is one of the principal means by which such learning is transmitted, the person who either cannot or will not read severely restricts his ability to participate in what is increasingly a world community.

B. Guidelines for the Preparation of Reading Teachers

The undergraduate preparation program for the regular teacher of reading should comprise approximately 25 percent of the four-year curriculum. As a concentration area for the middle grades teacher the program should constitute about 15 percent of the four-year curriculum and is considered only as a second area of preparation. The program should be in accordance with the following guidelines (the main difference in the two levels of preparation is in the depth of preparation).

GUIDELINE 1: The program should assure familiarity with the methods, materials, and basic research in developmental reading.

This area of the program should involve a survey in reading that would acquaint the prospective teacher with the various facets of reading instruction. It is anticipated that the preparation would be the foundation for subsequent preparation in the field of reading. Areas of appropriate study include foundations of reading, basic skills of reading, methods and materials for teaching reading, and fundamentals of reading.

GUIDELINE 2: The program should assure an understanding of the various ways of identifying and meeting the needs of individuals and groups through diagnostic and corrective techniques.

Preparation under this guideline assumes that there will be some study in the following areas: causes of reading disabilities; observation and interview procedures; diagnostic instruments; mechanics of reading; comprehension techniques; standard and informal tests; and report writing. Some of the appropriate courses in this area are diagnosis and correction, remedial reading, reading improvement, diagnosis of learning difficulties, and principles and procedures in remedial reading.

GUIDELINE 3: The program should assure an understanding of reading in relation to the different content and subject matter areas in the curriculum.

This area of study would include literature for children and/or adolescents, language arts and their interrelatedness, and reading as it relates to other disciplines.

GUIDELINE 4: The program should provide a clinical or laboratory practicum in reading diagnosis and correction in which the student works with reading disability cases under supervision.

The experience required in connection with the guideline might be provided as an integral part of a course or courses in the diagnosis and correction of reading disabilities. (See Guideline 2).

GUIDELINE 5: The program should provide sufficient preparation for the later pursuit of graduate study in reading.

C. Competencies Needed by Teachers to Achieve Program Objectives

Language Development

In order to carry out the objectives of the reading program, the initially certified teacher should possess the knowledge of how language functions.

1.0 Understand the concept of language as a symbol system for transmitting ideas, information, and feelings

    1.1 Understand phonemic structure, morphemic structure, semantics, and syntactic and intonation patterns

    1.2 Respect linguistic differences as they relate to socio-cultural and economic environment

2.0 Understand the importance of oral language development as a foundation for beginning reading instruction

    2.1 Understand the relationship between continuous language development and readiness for reading achievement at any level

    2.2 Stress language development in all instructional activities, including play and dramatic experiences

3.0 Understand the principles and stages of physical, social, emotional, and intellectual development

    3.1 Provide students with experiences for developing, extending, and enriching listening, speaking, and writing skills and relating them to reading

Professional Values

4.0 A commitment to employing appropriate research, measurement and assessment techniques and tools, and modern technology is essential. The teacher should also be conscious of the pros and cons related to assessment and sensitive to the correct use of measuring devices, strategies, and techniques

    4.1 Value research for what it can do to improve the learning environment

4.2 Be committed to an on-going research program appropriate to his/her ability and interests, and the needs of the learner

4.3 Be interested in correct selection of the appropriate instruments to measure the desired outcomes and be able to reject invalid and incorrect uses and findings.

4.4 Be devoted to providing, on a continuing basis, a planned system of measurement, evaluation, and assessment

4.5 Make a commitment to using appropriate technology such as television,computers, and other systems

4.6 Devote regular time to updating his/her ability to use emerging technology

4.7 Construct tests which can be administered on a fair and equitable basis

4.8 Establish and support a fair and equitable grading system

4.9 Employ a variety of audio-visual aids to supplement the instructional program

4.10 Be creative in the use of technology now available to enhance the learning experience

5.0 The initially certified teacher should demonstrate an understanding of the nature of the reading process

5.1 Understand reading as a process of communication and recognize its interrelatedness to the other language arts

5.2 Identify basic reading philosophies and use them to solve problems

5.3 Demonstrate knowledge and use of reading skills and strategies

5.4 Demonstrate the ability to select, evaluate, and use reading materials

5.5 Understand major reading research and its nature and applicability to reading instruction

5.6 Understand the influence of socio-cultural factors that enter the reading process

5.7 Utilize these understandings through appropriate instructional practices

Professional Skills/Techniques/Methodologies

The initially certified teacher should be able to provide effective instruction in comprehension.

6.0 Develop students' ability to predict the concepts and vocabulary of written text

6.1 Help students to survey text selections to make predictions and set purposes for reading

  - 6.2 Understand and use the Directed Reading-Thinking Activity and other techniques which teach students to habitually predict and establish purposes for reading

- 7.0 Relate students' previous knowledge to new concepts
  - 7.1 Understand the role of experience in comprehension and apply theory to instructional practices; i.e., assess students' current level(s) of understanding and modify instruction accordingly.
  - 7.2 Use appropriate strategies for relating new information to past experiences, such as anticipation guides, advanced organizers, structured overviews
  - 7.3 Assess students' understanding of key vocabulary terms prior to reading and provide necessary vocabulary instruction
- 8.0 Understand the levels of thinking and use questioning strategies to stimulate thinking
  - 8.1 Understand literal, interpretive (inferential), critical, and creative levels of thinking
  - 8.2 Ask questions on a variety of different levels
  - 8.3 Provide "think time" for students when asking questions
  - 8.4 Develop students' ability to support answers
- 9.0 Understand the role of listening comprehension or provide other means for guiding the listening of students
  - 9.1 Systematically set purposes for listening or provide other means for guiding the listening of students
  - 9.2 Provide instruction in effective listening strategies for those students who require it
- 10.0 Understand and teach students the differences between fiction and non-fiction
  - 10.1 Teach the use of plot, theme, characterization, setting, and style in literature
  - 10.2 Teach use of introduction, body, and summary in non-fiction
  - 10.3 Develop students' ability to follow the organizational structure of a selection such as cause/effect, sequence, compare/contrast, main idea/supporting details, description, enumeration
  - 10.4 Use various forms of study guides to help students develop the concepts and understand the organizational patterns of both fiction and non-fiction materials
- 11.0 Develop critical thinking/reading skills such as: fact and opinion, logic, emotionally charged words, propaganda, author's motives and point of view, and accuracy of content

12.0 Understand the role of interest and emotion in comprehension

    12.1 Develop an objective point of view in students

    12.2 Promote interest in the reading topics presented

13.0 Develop students' ability to use appropriate reading rate

    13.1 Instruct students in skimming and scanning

    13.2 Instruct students in adjusting rate to purpose, content, familiarity

14.0 Recognize that comprehension is the essence of reading and teach reading as a meaningful process

    14.1 Consistently establish a purpose for each reading task

    14.2 Consistently provid for discussion and reflection following each reading task

    14.3 Teach active reading strategies to students, such as predicting the content of the reading selection and systematically ask questions as they read

    14.4 Teach students to monitor their own reading so that the text makes sense to them

15.0 Develop students' ability to locate and synthesize information from a variety of sources

16.0 Develop students' ability to interpret graphic and pictorial materials

17.0 Teach a means for independently reading and studying text, such as SQ3R.

18.0 Lead students toward self-instruction in vocabulary development

    18.1 Instruct students in the effective utilization of context for determining word meanings

    18.2 Teach students to make appropriate use of the dictionary and glossary for determining specific word meanings

19.0 Word identification is the foundation on which comprehension and other aspects of reading depend. Thus, the initially certified teacher must demonstrate an understanding of various word recognition and word analysis techniques

    19.1 Know and teach whole word techniques, such as visual configuration, picture clue, word length, letter features, sight vocabulary, word patterns

    19.2 Know and teach various forms of meaning clues such as synonyms, homonyms, familiar expressions, definition, explanations, descriptions, examples, and other types of context clues

19.3 Know and teach syntactic clues such as sentence patterns, word order sequence, structure word markers, derivational suffixes and inflectional endings, punctuation, and typographic devices (parentheses, quotation marks, etc.)

19.4 Know and teach structural analysis skills such as syllables, roots and affixes, inflections, compound words, and contractions

19.5 Know and teach phonic generalizations and be able to:

19.5.1 Develop an understanding of the elements of phonics among pupils

19.5.2 Differentiate between synthetic and analytic phonics

19.5.3 Use discretion in teaching phonic generalizations, teaching only those which have a high degree of consistency

19.6 Know and teach various dictionary skills and be able to:

19.6.1 Teach students how to use a pronunciation key

19.6.2 Teach students how to interpret diacritical marks and dictionary respellings

19.6.3 Instruct students in the various types of information provided by the dictionary

20.0 The teacher is able to teach the various word recognition/analysis skills effectively

20.1 Understand the interrelatedness of word analysis skills and recognize the limitations of relying on only one approach to word analysis

20.2 Systematically teach pupils to apply phonics and other word analysis skills to actual reading situations, thus providing for learning transfer

20.3 Understand the differences in procedures for teaching word analysis among the various approaches to reading instruction, and select procedures which are appropriate for individual pupils

20.4 Use a balanced, eclectic approach to word analysis, rather than over-rely on one method

20.5 Develop a variety of individualized and group activities to stimulate mastery of word analysis skills

21.0 In our highly verbal culture an accurate understanding of the meanings of words is a necessary prerequisite for reading and meaning. Vocabulary is closely related to comprehension and reasoning. Thus, the teacher of reading should understand the cause of deficiencies in meaningful vocabulary.

21.1 Recognize that pupils have listening, speaking, reading and writing vocabularies, and these vocabularies will probably differ in scope and content

21.2 Use a variety of methods for developing vocabularies, such as a systematic study of words and their origins, study of affixes and roots, figurative language, exploring fine shades of meanings, wide reading

21.3 Understand that words are merely symbols for concepts, and that instruction in the underlying concept is necessary for a word to become meaningful to the learner

21.4 Provide direct experiences in developing new concepts whenever possible; use indirect experiences (such as pictorial representations) or symbolic experiences (such as verbal descriptions or explanations) only when direct experience is not feasible

Diagnosis and Remediation

The initially certified teacher of reading is able to design and implement an effective program of remediation.

22.0 Accurately determine reading difficulties and reading abilities of students

22.1 Construct, administer, and interpret an informal reading inventory

22.2 Accurately interpret the results of standardized reading achievement tests

22.3 Understand the characteristics, strengths, and limitations of different types of measurement devices

22.4 Use observation and other informal tests to verify diagnostic results and to determine additional strengths and weaknesses

22.5 Identify patterns of behavior which might indicate physical, social, emotional, and/or intellectual impairments that may affect the student's progress in reading

22.6 Compile assessment results using a class profile or check-list, and use this profile to individualize instruction

23.0 Continually diagnose the reading strengths and weaknesses of learners, regarding every reading experience as an opportunity for assessment

24.0 Select appropriate instructional materials for every child

24.1 Fit the materials to the child rather than the child to the materials

24.2 Select materials which are of appropriate length and content so that they reflect the reading demand of both the school and the real world

24.3 Provide for a balanced program by selecting a variety of materials covering various skills, reading levels, and interests

25.0 Develop appropriate instructional strategies for readers

25.1 Continually communicate with other teachers and use strategies which consider the reading demands of other classrooms and other areas of the curriculum

25.2 Provide for learning transfer by demonstrating how newly acquired skills can be used in reading textbooks and other materials

25.3 Use strategies which will lead the learner toward self-instruction

25.4 Use strategies which correlate the four areas of the language arts

25.5 Differentiate instruction and use strategies which will meet the needs of individual learners

25.6 Demonstrate awareness of the many reasons for reading failure such as physical causes, divergent language and cultural backgrounds, various psychological and educational factors and consider these in planning

26.0 Consider the importance of psychological factors in teaching

26.1 Identify students' interests and attitudes toward reading

26.2 Motivate students to complete particular tasks by making those tasks interesting and/or relevant

26.3 Stimulate pupils to read for enjoyment

26.4 Build the self-concept of readers

26.5 Use several techniques for dramatizing progress

26.6 Consider the interests and learning styles of students in selecting materials and planning instruction

26.7 Use a variety of techniques, materials, and classroom organizational patterns in the remedial program to create a learning environment which is distinguishable from the environments in which students have experienced repeated failure

26.8 Provide learning experiences in which each student can experience success

27.0 Recognize the expertise of other specialists and know when and how to make referrals

28.0 Empathize with reading needs of handicapped learners and display a positive attitude toward the ability of all students, regardless of socio-economic, cultural, or linguistic background

Program Planning and Implementation

29.0 Demonstrate the belief that effective reading instruction is a top priority in the educational system, and reflect this belief in practice

- 29.1 Develop appropriate cognitive and affective objectives for a successful reading program
- 29.2 Determine the pros and cons of various reading approaches and combine the favorable features of the approaches in a comprehensive reading program
- 29.3 Appropriately use a variety of instructional resources, including developmental, supplemental, non-print, and library materials
- 29.4 Use observation and test data to form instructional groups
- 29.5 Use observation and test data to individualize instruction, providing for the specific learning needs of every pupil
- 29.6 Use techniques which interrelate the four components of the language arts
- 29.7 Interrelate skills and abilities of language development, word analysis, comprehension, flexibility of rate, study skills, and literary appreciation
- 29.8 Understand and use several instructional approaches (e.g., basal reading series, individualized instruction, language experience, thematic instruction) and be able to:
  - 29.8.1 Demonstrate a variety of methods of record keeping for any instructional situation
  - 29.8.2 Investigate several basal reading programs for contrast and comparison
  - 29.8.3 Evaluate materials and organizational plans for teaching reading
- 29.9 Understand and implement the various aspects of the total reading program and be able to:
  - 29.9.1 Instruct youngsters in developmental, corrective, functional, and recreational reading
  - 29.9.2 Demonstrate familiarity with an involvement in developing a variety of methods and materials for reading in the content areas
- 29.10 Use organizational features which facilitate individualization and pupil-pupil/pupil-teacher interaction in the classroom and be able to:
  - 29.10.1 Use various grouping patterns for reading instruction

29.10.2 Use flexible groups for initial instruction, review, peer interest/activity, and personal enjoyment

29.11 Understand the functions of oral and silent reading and use these appropriately

29.12 Understand the importance of involving administrators, teachers, parents, students, and the general public in the planning and development of a program and be able to:

29.12.1 Meet with parents who hold a variety of differing viewpoints concerning schools and reading instruction

29.12.2 Interpret the reading/language arts program to the community

29.12.3 Obtain parental assistance in the home and in community activities which encourage student growth in reading

29.13 Continually communicate with parents and involve them in planning their child's reading instruction program and be able to:

29.13.1 Demonstrate familiarity with various instruments that indicate pupil performance and interpret the results of these instruments to parents

29.13.2 Frequently inform parents of their child's progress in reading

29.13.3 Provide a variety of techniques and materials which can be used by parents to reinforce their child's reading skills

Enjoyment of Reading

30.0 Foster an enjoyment of reading among students

30.1 Encourage students to develop wide reading interests

30.2 Demonstrate a wide variety of motivational techniques

30.3 Provide time during the day for recreational reading

30.4 Make available to students a wide variety of books and other media with varying interests and readability levels

30.5 Read to youngsters daily

30.6 Provide creative experiences with reading and literature

30.7 Set an example for students by reading extensively for pleasure and professional growth

Pre-reading Skills

The initially certified teacher is able to design and carry out a pre-reading instructional program which gives youngsters a solid foundation for reading.

31.0 Understand the historical development of reading readiness programs and relate research in reading readiness to instructional practices

31.1 Appropriately instruct each youngster in needed readiness skills and provide actual reading experiences for each child by adjusting reading methodology to meet individual needs, rather than delaying reading instruction until a designated readiness level, mental, or chronological age is reached

31.2 Recognize that reading readiness is reading in its beginning stages and subsequently provide reading-related tasks for youngsters

31.3 Recognize that earlier starts in reading do not guarantee greater success in reading in future years, and thus provide instruction which will add to the enjoyment and self-esteem of pupils

31.4 Recognize that, for earlier starts in reading to remain effective, later instruction must extend and capitalize upon early accomplishments; thus, communicate with teachers in higher grades regarding their reading programs and appropriately prepare youngsters for future instructional demands

32.0 Interpret and utilize the results of reading readiness test scores

32.1 Determine reading readiness needs of individual youngster based upon an analysis of sub-test scores and accurate interpretation of test items

32.2 Utilize the results of readiness test scores in program planning and provide appropriate instruction for each youngster based upon test results

32.3 Use observation as a diagnostic tool in meeting the needs of individual children and in verifying test results

33.0 Understand that reading is a language-based process and provide opportunities for oral language growth

33.1 Include experiences in the curriculum which offer opportunities to communicate in a variety of settings with different persons

33.2 Provide opportunities for children to experiment with language and simply enjoy it

33.3 Serve as a good oral language model

33.4 Include many opportunities for children to hear formal language patterns, such as storytelling, oral reading, recordings, poetry

33.5 Provide concrete experiences to teach various concepts and relational terms (such as same/different)

33.6 Relate oral language to reading by providing a variety of experiences which integrate the four processes of communication

34.0 Demonstrate a knowledge of the foundation skills in word analysis and teach these skills sequentially

34.1 Provide appropriate instruction in auditory discrimination to those youngsters who require it

34.2 Provide appropriate instruction in letter-sound correspondences, and instruct children in the application of phonics in actual reading situations

34.3 Provide visual discrimination training using tasks directly related to reading (i.e. letters, words, phrases, sentences)

34.4 Provide activities which give practice in visual memory

34.5 Provide a variety of activities for distinguishing letters of the alphabet and allow children to compare features of different letters to facilitate learning

34.6 Provide training in the use of context and picture clues

34.7 Use a variety of methods to teach words by sight, such as language experience, key vocabulary, assisted reading, rebus sentences, word banks

35.0 Understand that comprehension is the essence of reading and provide opportunities for comprehension development

35.1 Provide for planned vocabulary and concept growth, using enactive (direct) or iconic (pictorial) experiences whenever possible

35.2 Show children the true purpose of reading by providing opportunities for guided listening

35.3 Encourage spontaneous responses and reactions following story reading

35.4 Provide a variety of listening activities for comprehension development, such as following directions or recalling the sequence of events in a story

36.0 Select appropriate materials for pre-reading instruction

36.1 Provide a variety of materials to accommodate a wide range of interest and abilities

36.2 Provide a large number of reading-related materials which can be used independently by the youngsters

36.3 Select materials which are appealing to children

36.4 Use many manipulative materials in the pre-reading program

36.5 Use materials which complement the first grade reading program

36.6 Verbalize his/her objectives for using particular materials

37.0 Recognize that social and emotional maturity are factors in beginning reading success and establish a classroom environment which promotes healthy social and emotional development

37.1 Frequently give both short and long term praise to youngsters which is specific to completion of a particular task or goal

37.2 Recognize the contribution of each child and show the child that his work is valued

37.3 Encourage the participation of each child and provide opportunities to develop independence

37.4 Provide activities in which each youngster can experience success

37.5 Plan flexibly in order to accommodate a variety of learning styles

38.0 Understand that one of the most important tasks in pre-reading instruction is to foster the desire to read

38.1 Provide instruction which promotes enthusiasm for reading

38.2 Read and tell stories to children frequently and effectively

38.3 Integrate reading into daily classroom frequently and effectively

38.4 Utilize classroom displays which reflect the excitement of literacy

Professional Growth and Development

39.0 Recognize the importance of continuous professional growth and development

39.1 Participate in needs assessment and research in order to determine program needs and work with staff to specify the objectives of a total program of reading instruction

39.2 Demonstrate awareness of and participate in organizations which stimulate professional growth

39.3 Use a variety of professional resources in seeking solutions to instructional problems in reading and language development

READING

(Master's Degree and 6th Year)

A. Role of the Reading Specialist

The reading specialist is defined as one who has the ability to:

- Assist the school in assessing, planning, implementing, and evaluating the reading program within the school;
- Assist the school in interpreting the school reading program to parents and the public;
- Select, administer, and interpret norm- and criterion-referenced reading and achievement tests;
- Assist the school in determining the availability of instructional media, based upon the instructional goals of different subject areas of classroom teachers in the school;
- Plan, initiate, and evaluate action research in reading within the school setting; and
- Function at an advanced level in the diagnosis and remediation of reading and learning problems

B. Guidelines for Graduate Reading Programs

The program leading to the graduate certificate for the teacher of reading would be through one of the following two channels: (1) when one has a background of 18 semester hours or more (or "A" certification in the field) in reading, at least 40 percent of the master's degree program would be in the field of reading; and (2) when one has no background in reading, all of the master's degree program would be in reading and closely related study. The program beyond the 18 hours required for the "A" certificate would be in accordance with the following guidelines:

GUIDELINE 1: The program should assure an understanding of developmental reading with emphasis on issues, trends, and research at an advanced level.

GUIDELINE 2: The program should provide study at an advanced level in the diagnosis and remediation of reading and learning problems and should provide a practicum in the area.

GUIDELINE 3: The program should provide an understanding of patterns of organizing reading programs, including remedial programs and techniques of supervising both types.

GUIDELINE 4: The program should include cognate areas of study which would contribute to the competency of the teacher in the area of reading.

Areas of study might include advanced study in testing and evaluation; study at an advanced level in language arts and children's literature; psychology, including such aspects as personality, cognition, and learning behaviors; and individual psychological measurement.

C. Competencies for Graduate Reading Programs

The graduate level programs provide depth in the competencies required for the undergraduate program. The sixth year program includes the same competencies as the master's degree but with more depth of preparation.

PHYSICAL EDUCATION: GRADES K-12

A. Purpose and Nature of Physical Education in the School Curriculum

As an essential part of the school curriculum, the physical education program provides opportunities for a wide range of movement experiences which assist students in understanding and accepting themselves as physical beings. Physical education instruction provides opportunities for students to develop: (1) motor skills; (2) physical fitness; (3) cognitive understandings; (4) social skills; and (5) positive self-concepts.

At every level the purpose of physical education is to help students become fully functioning individuals, realizing their unfolding physical, mental, emotional, and social potentials. The program includes balanced participation in movement experiences through physical fitness activities, sports, games, dance, gymnastics, and aquatics. Emphases at the different levels include:

- Elementary - a variety of movement skills and motor skills that provide the bases for participation in a variety of activities
- Middle school - specific skills that are learned and refined for participation in individual, partner, and team activities
- High school - various learning experiences which encourages the student to participate in self-directed activities throughout life

B. Guidelines for the Preparation of Physical Education Teachers

The preparation program should be flexible enough to provide opportunities for independent study, specialization, personalization, and self-pacing. It should constitute approximately 35 percent of the total undergraduate curriculum and should be developed in accord with the following guidelines:

GUIDELINE 1: The program should provide a broad understanding of the scientific and philosophical bases of physical education.

Preparation in this area should enable the student to select activities within the program based on knowledge of growth and development; interpret historical and philosophical concepts of physical education and its related programs; interpret the interrelationship of physical education to the total school program; apply basic anatomical, kinesiological, physiological, psychological, and sociological concepts to the teaching of physical education; apply mechanical principles of movement; and formulate a philosophy based on a knowledge of the human needs and the nature of learning.

GUIDELINE 2: The program should develop a comprehensive knowledge in the analysis of movement.

The prospective teacher should be able to apply mechanical principles of movement and analyze the theoretical concepts of movement; analyze skill performance and bring about its improvement.

GUIDELINE 3: The program should provide for the development of a wide range of motor skills, especially those related to the area of teaching.

Study under the guideline should enable the student to demonstrate proficiency in the performance of the activities included in a balanced program; express himself creatively through movement, perform with proficiency in movement skills which allow him to participate more fully in a variety of activities; demonstrate fitness in keeping with his physical capacities and potential; teach concepts of safety for accident prevention and administer first aid including care of athletic injuries; and find enjoyment and success in his own movement experiences.

GUIDELINE 4: The program should require an in-depth study of teaching-learning processes, materials, and equipment specifically related to the area of physical education.

Preparation should include study that (1) would enable the student to select and evaluate teaching strategies as they relate to learning processes; (2) recognize teacher behavior as it influences student responses; (3) evaluate changes that take place in students as a result of learning experiences and determine the effectiveness of the experiences which produce these changes; (4) use problem-solving processes in making wise decisions related to physical education; (5) use effectively various types of educational and instrumental media; (6) devise and use appropriate evaluative tools and measuring devices; (7) demonstrate practical procedures in the construction, selection and purchase, care, and repair of facilities and equipment; (8) demonstrate proficiency in the teaching process, including the skill of observation; and (9) evaluate his own personal health as it relates to effectiveness in teaching.

GUIDELINE 5: The program should provide knowledge and competencies in planning, organizing, administering, supervising, evaluating, and interpreting various aspects of a balanced physical education program.

Study under this guideline should enable the student to (1) know the components of a balanced program and the relationship to intramurals and athletics; (2) design a balanced program which meets the needs of all students; (3) demonstrate practical procedures in the construction, selection and purchase, care and repair of facilities, equipment, and supplies; (4) adapt the program of physical education to meet the needs of exceptional students; (5) evaluate insurance coverage necessary to the physical education program in terms of State legal liability; (6) use effectively various types of educational and instructional media; (7) devise and use appropriate evaluative tools and measuring devices; (8) interpret the interrelationship of physical education to the total school program; (9) identify the role and associated behavior of the teachers and coaches within the larger social structures of the school and the community; (10) analyze the differences between required and elected programs in physical education and their impact on achievement of educational and recreational goals; and (11) know the structure and goals of informal and formal sports organizations and how they affect and are affected by society.

GUIDELINE 6: The program should provide basic concepts of health required for personal, school, and community needs.

Study in this area should enable the student to demonstrate an understanding of the broad scope of health needs and problems in communities and in the world today; recognize student health problems and needs; identify what effect the student's health has on the teaching-learning process; and know his own personal health as it relates to his effectiveness as a teacher.

GUIDELINE 7: The program should include provision for extensive laboratory experiences which provide opportunities for direct association with students.

The area of study should enable the student to develop leadership and human relations skills and demonstrate proficiency in the teaching process; select and evaluate teaching strategies as they relate to learning processes; recognize teacher behavior as it influences student responses; evaluate changes that take place in students as a result of learning experiences and determine the effectiveness of the experiences which produce these changes; select activities within the program based on knowledge of growth and development; know the different cultural and environmental backgrounds of students; identify the need for techniques in developing good human relations; demonstrate concern and feeling for and understanding of youth; develop an attitude of acceptance of students' needs and rights; and work with and show a positive attitude toward others.

GUIDELINE 8: The program of preparation should develop an individual awareness of the need for continuing education and professional development.

C. Competencies Needed by Teachers to Achieve Program Objectives

Physical Education (Grades 6-9)

1.0 Demonstrate knowledge, skills, and attitudes concerning major goals of physical education (motor skills, fitness, knowledges, self-concepts, and social skills) to implement 6-9 physical education instruction

  1.1 Understand and use a variety of movement experiences that promote motor skill development in the areas of games/sports, rhythms/dance, tumbling/gymnastics, and swimming.

  1.2 Understand and promote physical fitness and lifetime activities

  1.3 Understand and use cognitive concepts related to movement (time, space, quality of movement, relationships), the body, fitness, and safety

  1.4 Understand and implement physical education activities as a means to develop a positive self-concept and express a variety of concepts, emotions, and attitudes

  1.5 Understand and use physical activities to develop positive social interaction such as respect for people, equipment, rules, fair-play, and safety

  1.6 Understand, select, and use appropriate teaching methods and equipment, materials, and supplies to implement the physical education program

  1.7 Select and design appropriate techniques to evaluate student progress toward major goals in physical education

Professional Development: Philosophy and Growth

1.0 A sound educational philosophy and a commitment to professional growth is essential. Therefore, the teacher should be able to:

1.1 Define and develop a sound philosophy of physical education directed to the needs of the learner

1.2 Recognize the philosophical basis for general and specific educational programs at various levels

1.3 Know the major philosophical positions for physical education, including idealism, realism, pragmatism, and existentialism

1.4 Identify appropriate professional organizations at the local, State, district, and national levels

1.5 Know functions of and resources available from local, State, and national agencies and organizations which serve different segments of the profession

1.6 Be aware of the different professional publications and their specific audiences

1.7 Be aware of the trends related to changing and emerging career patterns

Professional Skills/Techniques/Methodologies

2.0 A sound philosophy of physical education will be observed according to the consistency of its use in programs. The professional growth of the teacher will be reflected in his/her involvement in professional activities and organizations. Therefore, the teacher should be able to:

2.1 Propose, document, and formulate programs reflecting the major philosophical positions

2.2 Design curricula and programs based on a sound philosophy of general and physical education

2.3 Compare the curricula offered to the learner with local and state requirements.

2.4 Assess, analyze, and use publications of various agencies and organizations which will aid in the learning experience

2.5 Maintain and improve his/her professional competency by inservice educational experiences

Professional Values

3.0 A commitment to a sound philosophy of general education and physical education is essential to promoting an understanding of various educational experiences. Therefore, the teacher should:

- 3.1 Be aware of the necessity to act in a consistent philosophical framework on a personal level
- 3.2 Be interested in the learner's acquisition and selection of a philosophy for life, including the use of a value system
- 3.3 Be able to demonstrate a concern for the value of philosophy in teaching
- 3.4 Join and actively participate in professional organizations at the local, State, national, and international levels
- 3.5 Contribute to the profession through communication channels, i.e., individuals, agencies, groups, and organizations
- 3.6 Work cooperatively with allied professionals to meet the needs of the learner, i.e., individuals, agencies, groups, and organizations
- 3.7 Be committed to excellence in teaching

Foundations

4.0 A knowledge of historical and scientific principles is essential to providing a sound program of instruction. Therefore, the teacher should be able to:

- 4.1 Identify leaders, movements, and events which have shaped present day physical education
- 4.2 Become familiar with current trends and future direction of physical education
- 4.3 Recognize how physical education can meet the basic needs of the learner
- 4.4 Recognize that successful participation reinforces learning and improves the psychological and sociological life of the learner
- 4.5 Be aware that the learner will develop a positive self-image through successful participation in motor activities
- 4.6 Identify the positive contribution which participation in physical education activities can make in human relations
- 4.7 Recognize current concerns related to sexism
- 4.8 Recognize the basic scientific facts and concepts common to the biological sciences such as anatomy, physiology, and kinesiology

4.9 Identify scientific terms related to each major scientific area

4.10 Understand the relationship among foundation areas

Professional Skills/Techniques/Methodologies

5.0 It is essential that instruction be provided which is based on sound psychological, sociological and biological principles. Therefore, the teacher should be able to:

5.1 Apply historical principles and contributions to the present day program, i.e., survival skills, fitness emphasis, and economic implications

5.2 Provide opportunities for the learner to participate in activities in which he/she can acquire, develop, and experience cooperative and competitive attitudes

5.3 Provide learning experiences in which physical activity can be enjoyed

5.4 Provide a learning climate conducive to successful participation and the development of a positive self-image

5.5 Plan and implement a program based on scientific principles, i.e., energy cycles, kinesthesis

5.6 Continually evaluate scientific findings and apply them where appropriate

Professional Values

6.0 The historical events, movements, and leaders in physical education provide the foundation of present day physical education programs. Additionally, the principles of sociology, psychology, and the biological sciences are essential. Therefore, the teacher should:

6.1 Appreciate the contribution made by early leaders in physical education

6.2 Value the movements and events which have established present day physical education

6.3 Be conscious of each individual learner and his/her needs

6.4 Accept each learner as an individual

6.5 Value play in its many forms and recognize the opportunities presented for the learner to develop socially and mentally through participation in activities

6.6 Be committed to equal opportunities for all learners regardless of race, sex, creed, or national origin

6.7 Be individually characterized by an emotionally mature, acceptable level of conduct

6.8 Be professionally characterized by a curriculum utilizing various play forms to accomplish physical growth and development objectives

6.9 Be aware of the scientific principles and foundations of physical education and employ them in the curriculum

6.10 Be interested in the scientific approach to problem solving

6.11 Be committed to developing the whole person

Movement Foundations - Content and Overall Knowledge

7.0 A working knowledge of movement in all its forms is essential to achieving the objectives of physical education. Therefore, the teacher should be able to:

7.1 Recognize various levels of motor performance and ability, and individual differences among learners

7.2 Define, recognize, and identify terminology related to movement and motor skills, i.e., force, flow, spatial relativity, balance, etc.

7.3 Recognize and know scientific principles of movement acquisition and development, i.e., levers, physical forces, stability

7.4 Identify the movement classifications of locomotor, nonlocomotor, and manipulative as well as specific sports skills

7.5 Know the theories of motor learning and how they relate to growth and development of the learner

7.6 Recognize the factors that enhance and detract from learning

7.7 Recognize the basic principles of perceptual motor development used in all phases of movement.

Professional Skills/Techniques/Methodologies

8.0 It is essential that effective and efficient programs of psycho-motor learning be provided. Therefore, the teacher should be able to:

8.1 Analyze and improve movement pattern competencies of the learner at different levels of ability

8.2 Design and employ various methods of instruction, i.e., command, problem solving, contract learning, small group

8.3 Plan, implement, and evaluate a program of motor learning relevant to the age characteristics, developmental levels, and needs of the learner

8.4 Plan and implement units of study in the specialized areas of rhythm and dance, games and sports, fitness, aquatics, and gymnastics

8.5 Evaluate equipment and facilities according to their use in the program and be able to construct inexpensive teaching aids when their use suffices.

8.6 Apply appropriate theories of learning in planning and implementing teaching strategies

8.7 Use principles of motor learning

Professional Values

9.0 It is important that the teacher possess a positive attitude toward all movement forms and experiences and value the acquisition of skill for himself/herself and others. Therefore, the teacher should:

9.1 Be aware of and appreciate the role of movement experiences in life and be able to use proficient movements in a wide variety of activities for leisure time

9.2 Be committed to a curriculum which employs movement experiences for the learner

9.3 Apply, analyze, synthesize and evaluate the fundamental principles of motor skill acquisition and development

9.4 Be selective in utilizing the teaching techniques most appropriate for the learner at his/her skill level and ability

Administrative Functions: Curriculum, Safety, First Aid, and Legal Aspects, Content and Overall Knowledge

10.0 A working knowledge of administrative functions including curriculum, safety, first aid, and legal aspects is imperative. Therefore, the teacher should be able to:

10.1 Know administrative functions and duties, i.e. personnel, budgeting, purchase of supplies and equipment, and insurance coverage

10.2 Identify plans, policies, and guidelines applicable to the well-being of the learner

10.3 Be knowledgeable of plant and facilities management

10.4 Know the physical educator's role in general education

10.5 Be aware of different administrative positions, i.e., supervisor, lead-teacher, department chairperson, athletic director

10.6 Be familiar with the policies and regulations established by local boards of education, State Board of Education, and Federal agencies

10.7 Become knowledgeable of legal terminology and laws, i.e., contributory negligence, tort, and i.e., Title IX, PL94-142, in loco parentis

10.8 Recognize the learner's rights and due process

10.9 Recognize and identify needs of learners and how the curriculum should meet these needs

10.10 Know different approaches to curriculum construction

10.11 Know the specific sequential levels of curriculum planning and development

10.12 Know basic principles of first aid, and policies and procedures for emergency care

10.13 Recognize the appropriate facilities, equipment, and supplies relevant to the learner's level of ability and developmental growth

10.14 Know principles of a total safety program including supervision, inspection of equipment, and maintenance of facilities

Professional Skills/Techniques/Methodologies

11.0 It is imperative that appropriate administrative functions be utilized in the physical education program. Therefore, the teacher should be able to:

11.1 Perform administrative duties which would include budgeting, purchasing of supplies and equipment, and planning for maximum use of facilities as the designated role dictates

11.2 Plan and implement programs which operate within policies, laws, and regulations as dictated by the appropriate governing body, i.e., Title IX, PL94-142 and Public School Laws of North Carolina

11.3 Develop and implement a comprehensive, sequential curriculum for all levels

11.4 Plan daily lessons to meet the needs of the learner

11.5 Establish and apply preventive safety policies and regulations

11.6 Apply basic principles of first aid

11.7 Use appropriate teacher resources, i.e., local and State guides and recommended courses of study

Professional Values

12.0 It is essential that the physical education teacher be committed to acquiring and using administrative skills in all of the program aspects. Therefore, the teacher should:

12.1 Be committed to having lesson plans and resource units current, correct, and complete

12.2 Have a desire to update skills and teaching abilities

12.3 Seek methods to improve the curriculum

12.4 Employ a variety of teaching methods and materials

12.5 Be devoted to establishing safety policies, emergency procedures, and other common techniques of safety in the learning environment

12.6 Be committed to taking the correct action while following school policies or guidelines as they relate to the welfare of the learner

Fitness - Content and Overall Knowledge

13.0 A knowledge of the component parts of fitness, their relationship to growth and development, and how fitness can be acquired and maintained is essential. Therefore, the teacher should be able to:

13.1 Identify the terms specific to fitness such as muscular strength and endurance, cardiovascular endurance, flexibility, speed, strength, and balance

13.2 Define the terms of growth, development, and maturation

13.3 Become knowledgeable of fitness activities, programs, and tests appropriate to the various growth levels

Professional Skills/Techniques/Methodologies

14.0 The acquisition and maintenance of physical fitness is important in the life of the learner. Therefore, the teacher should be able to:

14.1 Plan and administer a sequential, professional program of fitness which incorporates activities and testing

14.2 Administer fitness tests which possess state and national norms, i.e., North Carolina Motor Fitness Battery and Youth Fitness Test, on a planned schedule

14.3 Apply the results or findings in diagnosing student needs and in prescribing programs to meet those needs

Professional Values

15.0 The teacher should be aware of the component parts of fitness, appreciate their relationships to growth and development and be committed to the development and maintenance of personal and the learner's physical fitness. Therefore, the teacher should:

15.1 Maintain a level of personal fitness which serves as a role model for the learner

15.2 Exhibit positive health values and the skills in his or her personal behavior

15.3 Value and provide a sequential progressive program of activities throughout the curriculum to enable fitness development and maintenance

Exceptional Learner - Content and Overall Knowledge

16.0 The physical education teacher must know the range of and abilities among students. Therefore, the teacher should be able to:

16.1 Assist in identifying the learner who needs adapted physical education

16.2 Recognize the wide range of needs and abilities of the handicapped learner

16.3 Recognize the specific individual education program designed for the learner

16.4 Recognize the gifted and talented learner who needs special opportunities to develop his/her potential

Professional Skills/Techniques/Methodologies

17.0 The ability to test students, classify them according to their needs, and design programs based on their individual capabilities is vital. Therefore, the teacher should be able to:

17.1 Administer appropriate motor skill tests that will assess the motor skill capabilities of each student

17.2 Provide a classification for the student in regard to his/her skill level

17.3 Design educational plans for the exceptional learner cooperatively with parents, teachers, and administrators

17.4 When appropriate, mainstream children needing adapted physical education into regular classes

17.5 Provide opportunities for the gifted and talented learner to develop his/her potential

Professional Values

18.0 The teacher must be conscious of the range of individual differences, capabilities, talents, and skills among learners. Therefore, the teacher should:

18.1 Be sensitive to the needs of the typical and the atypical learner and be able to plan and implement programs for them

18.2 Be able to relate to learners at all levels of ability

Research, Evaluation and Technology - Content and Overall Knowledge

19.0 A knowledge of current research, evaluation, and technology is desirable. Therefore, the teacher should be able to:

- 19.1 Demonstrate a knowledge of current research
- 19.2 Identify the established research techniques to improve learning experiences
- 19.3 Organize class plans based upon valid standards established by research
- 19.4 Know basic elements of applicable measurement, evaluation, assessment tests, and techniques
- 19.5 Define and use instruments, terms, and tests to measure progress and achievement of the learner
- 19.6 Identify types of technology and teaching resources available
- 19.7 Become familiar with possible impacts of technology

Professional Skills/Techniques/Methodologies

20.0 Select and conduct appropriate research programs

- 20.1 Select and conduct appropriate research programs
- 20.2 Design and apply research which is feasible in terms of economical and administrative consideration
- 20.3 Select and apply research findings from allied fields
- 20.4 Provide on-going evaluation program as an integral part of the total curriculum

Professional Values

21.0 A commitment to employing appropriate research, measurement and assessment techniques and tools, and modern technology is essential. The teacher should also be conscious of the pros and cons related to assessment and sensitive to the correct use of measuring devices, strategies, and techniques. Therefore, the teacher should:

- 21.1 Value research for what it can do to improve the learning environment
- 21.2 Be committed to an on-going research program appropriate to his/her ability and interests, and the needs of the learner.
- 21.3 Be interested in correct selection of the appropriate instruments to measure the desired outcomes and be able to reject invalid and incorrect uses and findings

21.4 Be devoted to providing, on a continuing basis, a planned system of measurement, evaluation and assessment

21.5 Make a commitment to using appropriate technology such as television, computers, and other systems.

21.6 Devote regular time to updating his/her ability to use emerging technology

21.7 Construct tests which can be administered on a fair and equitable basis

21.8 Establish and support a fair and equitable grading system

21.9 Employ a variety of audio-visual aids to supplement the instructional program

21.10 Be creative in the use of technology now available to enhance the learning experience

22.0 Physical Education – Computer Competencies (Level II)

22.1 All Physical Education teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Physical Education by:

22.1.1 Exhibiting a working knowledge of computer technology

22.1.2 Being prepared to set up a computer terminal

22.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval.

22.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

22.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

22.2 Physical Education teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

22.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom- related record keeping

22.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, language lab data, and analysis.

22.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Physical Education program (CAI) relative to the five major areas of Physical Education instruction: Fitness; Recreational Dance; Stunts, Tumbling, and Gymnastics; Games and Sports; and Basic Movement

22.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

22.3 The Physical Education teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

22.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, etc.

22.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Physical Education experiences

22.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

22.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

HEALTH EDUCATION: GRADES K-12

A. Purpose And Nature of Health Education In The K-12 Curriculum

The public school health education *Course of Study* and *Teacher Handbook* present an approach to health education focused on students learning the skills necessary to manage their own health risk behaviors. The purposes of the health education *Course of Study* and *Teacher Handbook* are not to study health problems or issues, to learn human biology, or to learn medical facts, except as these may be essential for behavior self-management. The learning of behavior management skills constitutes the core of the health education program. Healthful behaviors, not improved health knowledge, are the desired outcome.

Health risk behaviors refer to behaviors that pose either immediate danger or longer-term consequences resulting from on-going behaviors. The risk behaviors considered closely resemble those identified in the federal publication, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives.*

The health education program also has a moral/civic component in that the term "health behaviors" includes those behaviors that affect others (either positively or negatively) as well as behaviors that affect oneself.

Health Education goals and objectives are grouped under several "organizers," such as stress management, nutrition/weight management, and relationships. Within these organizers both skills and information are the subject matter. Students learn skills in the context of concrete health issues. The intention is that teachers will then extend the skill learning by conducting classroom activities that enable students to practice their behavior management skills with a variety of high-risk health behaviors (those listed in the *Course of Study*).

To achieve depth and effectiveness in the public school health education program, the scope of the curriculum is delimited according to the following criteria:

- Student has a significant measure of personal control over health issue or health behavior.

- Content is necessary for behavior self-management, not just knowledge for its own sake.

- Content is within the capabilities of students/teachers/schools.

- Content deals with an important health risk (immediate danger or long-term risk).

- Content is not customarily or totally dealt with by parents or others.

- Content is unlikely to be dealt with adequately in another curricular area.

- Content is required by law or State Board of Education policy.

- Content is appropriate for the entire student population at the age level (the health education *Course of Study* is not an "at-risk" program, but the program should provide for the needs of high-risk students, either as part of the regular health education program or through alternate means).

- Content is appropriate for all geographic areas in the State
- Content adequately represents the health needs of the various demographic groups in the state.
- Content challenges students.

Professional preparation programs may choose to exceed these criteria in designing their own teacher education curricula.

B. Guidelines and Competencies for the Preparation of School Health Educators

GUIDELINE 1: The prospective teacher of health education must comprehend both the role and context of health instruction within the school and community.

1.1 Be aware of all the components of a comprehensive school health program, their interrelationships, and their functions in promoting the well-being of students and staff. These components include:

  1.1.1 Healthful school environment (physical, emotional, and social)

  1.1.2 Comprehensive health education (including both curricular and extra-curricular instructional opportunities)

  1.1.3 School health services

  1.1.4 Physical education

  1.1.5 Child nutrition services

  1.1.6 Student support services

  1.1.7 Health promotion for faculty and staff

  1.1.8 Integration of school and community health planning and programming, including parental involvement

  1.1.9 School health administration

1.2 Describe the role of health education within each component of the comprehensive school health program and the role of each component in reinforcing health instruction

GUIDELINE 2: The prospective teacher of health education must be knowledgeable of important health determinants, health risks, health goals, and health-related behaviors.

2.1 Describe the major health risk behaviors for youth and adults by priority of risk, associated risk factors, etiology, consequences, prevention strategies, and sources of information about each

2.2 Define the contribution of the various determinants of health, including biological, social, economic, environmental, health care access, intellectual, and behavioral factors, to the health status of individuals

2.3 Identify the major health objectives for the nation for both youth and adults

2.4 Define health as a multi-dimensional concept incorporating social, emotional, intellectual, and physical facets

GUIDELINE 3: The prospective teacher of health education must be able to determine the health needs, problems, interests, and progress of students.

3.1 Demonstrate the use of appropriate personal health appraisal and assessment methods, including attendance and behavioral measures

3.2 Correlate health needs, problems, and interests with the growth and development level of the student

3.3 Analyze the impact of the community and school on student well-being

3.4 Adapt the program to the special needs of exceptional children

3.5 Locate specific means of referral for students who need more than instructional assistance

GUIDELINE 4: The prospective teacher of health education must be capable of planning, implementing, and evaluating that part of the Comprehensive School Health Program for which she or he is responsible, with emphasis on the instructional program.

Program Planning

4.1 Develop instructional goals and objectives based on analysis of student needs, problems, interests

4.2 Establish age and developmentally appropriate health risk priorities

4.3 Integrate legislative, State Board of Education, and local policy mandates

4.4 Asses availability of resources, time, facilities, and equipment

4.5 Devise or locate appropriate program assessment and evaluation methods and instruments

Program Implementation

4.6 Target instruction toward students' health-related behaviors

4.7 Design instruction focused on development of student skills in the following:

4.7.1 Self-esteem building, including self-perception, self-acceptance, and self-efficacy

4.7.2 Behavior self-management, including self-awareness/self-monitoring, ethics development, decision-making/problem-solving, and planning behavioral strategies

4.7.3 Communicating, including expressing empathy, assertiveness, conflict resolution and negotiation, and responding to persuasion

4.7.4 Using appropriate resources, especially for assessing need for help, locating sources of help, exercising rights, and overcoming obstacles

4.8 Employ a variety of interactive, experiential teaching/learning strategies

4.9 Select and utilize community resources appropriately

4.10 Foster and support strategies that reinforce healthful behaviors throughout the comprehensive school health program

Program Evaluation

4.11 Select and utilize appropriate methods and instruments

4.12 Analyze experienced and descriptive outcome data

4.13 Interpret program progress and revise program as appropriate

GUIDELINE 5: The prospective health education teacher must successfully engage in a sequence of laboratory and field experiences.

5.1 Have direct contact with practitioners representing each component of the comprehensive school health program.

5.2 Participate in the activities of at least one community health agency.

5.3 Design, implement, and evaluate a personal health behavior self-management plan.

5.4 Perform as a health teacher in a school.

GUIDELINE 6: The prospective health education teacher must demonstrate the attributes of a professional health educator.

6.1 Describe the ethical responsibilities of a health educator.

6.2 Trace the historical foundations of the profession.

6.3 Recognize the responsibilities of a health educator as a behavioral role model.

6.4 Support and promote the Comprehensive Health Program.

6.5 Engage in professional activities to upgrade and update skills and knowledge in the field of health education.

6.6 Recognize responsibility to support professional health organizations.

GUIDELINE 7: The prospective health education teacher must demonstrate an understanding of basic concepts of a variety of forms of instructional technology, including laser disks, computer hardware, use of computers and peripherals in health instruction, and classroom and instructional management by:

7.1 Exhibiting a working knowledge of computer technology.

7.2 Being prepared to set up a computer and/or terminal.

7.3 Exhibiting familiarity with the basic components of a computer system, e.g., input/output, storage, retrieval.

7.4 Performing computer operations: on-off sequence, loading/executing/printing/saving/copying programs.

7.5 Understanding the various types of computers and their designed tasks, e.g., "mainframe", "mini", and "micro" computers.

7.6 Identifying, evaluating, and selecting software programs (computer assisted instruction) appropriate for instructional purposes.

7.7 Identifying, evaluating, and selecting software programs appropriate for classroom management, e.g., student enrollment, grades, student performance, individualized education programs, and other classroom-related record keeping.

7.8 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom/facilities/lab, e.g., inventory, purchase requests, and data and statistical analysis.

7.9 Understanding authoring systems and using these software programs for instructional purposes, including modifying these programs for instructional use.

7.10 Using video technology, e.g., videotape recorders/players, laser disc technology, CD ROMs, to enhance content area teaching and learning experiences.

7.11 Selecting and using such input and output peripherals as a video camera, mouse, modem, printer, and scanner for instructional and management purposes.

7.12 Using a computer to access research materials.

7.13 Independently pursuing efforts to maintain currency in the area of electronic instructional technology.

GRADUATE HEALTH EDUCATION GUIDELINES

Graduate studies for health education teachers are intended to enable them to develop increasingly greater degrees of autonomy and competency in the areas delineated by these guidelines. Each degree level should seek to prepare practitioners with higher levels of independence and the ability to collaborate with the various populations associated with the educative process in order to provide a significant, positive impact upon infants, children, youth, and adults in school settings.

The following themes should be reflected in the professional studies component of graduate programs, as articulated in the guidelines:

1. diversity of individuals, including cultural, exceptional, racial, gender, and economic
2. human development, including a focus upon adult learners
3. evaluation and use of technology
4. practical application

GUIDELINE 1: STUDY IN THE DISCIPLINE

The graduate program in health education should provide for concentrated study in the teacher's major field of study. Study should be characterized by flexibility and differentiation in recognition of individual needs and differences in background of education and experience.

GUIDELINE 2: CONTEXTS OF SCHOOLING

The graduate program in health education should provide opportunities for students to extend their study of the historical, philosophical, sociological, political, economic, and legal contexts in which schooling occurs. Study should include but not be limited to the historical role of the school in American society; influential philosophies and theories of education; the sociological attributes of the education environment; and the political, economic, and legal foundationS of education.

GUIDELINE 3: RESEARCH

The graduate program in health education should provide opportunities for students to acquire the knowledge, understanding and skill necessary to design, implement, and evaluate research. Study should include but not be limited to qualitative and quantitative research, research design and methodology, and descriptive and inferential statistics.

GUIDELINE 4: HUMAN DEVELOPMENT

The graduate program in health education should provide opportunities for students to extend their understanding of human development. The program should include but not be limited to the study of theories and research in human development; the nature of the learner as an individual and in groups; the characteristics of diverse populations; understanding of learning theory appropriate to the student's discipline; and strategies for dealing effectively with diverse populations.

GUIDELINE 5: CURRICULUM AND INSTRUCTION

The graduate program in health education should provide opportunities for students to study methods for designing, implementing, and evaluating curriculum and instruction intended to meet the needs of diverse student populations. These experiences should relate to different disciplines, as appropriate. These experiences include but are not limited to models of curriculum design representing different theoretical perspectives; program evaluation; instructional strategies representative of different teaching models; teaching styles; and the relationship to and utilization of technology in the design, implementation, and evaluation of curriculum and instruction.

GUIDELINE 6: ASSESSMENT

The graduate program in health education should provide opportunities to extend competence in assessing the teaching and learning processes for diverse populations. Study should include but not be limited to appropriate statistical methods; methods and techniques of diagnosis of diverse learners; design, use, and interpretation of formative and summative measures; and evaluation of instructional programs.

GUIDELINE 7: EDUCATIONAL LEADERSHIP

The graduate program in health education should provide opportunities for students to develop the skills to provide quality leadership in educational settings. Skills should include but not be limited to mediating conflict resolution, facilitating group process, designing curriculum, and exhibiting professional vision and initiative.

Revised 12/92

Vocational Education (6-12)

VOCATIONAL EDUCATION AREAS

A. Purpose and Nature of Vocational Education in the School Curriculum

The overriding goal in vocational education is to insure a comprehensive and qualitative program through which all children and youth are brought to a level of performance in the occupational world commensurate with their human potential and the needs of society. In grades K-6, the objective is to develop vocational awareness in children and to provide vocational information through various activities. In the middle grades, curricula offerings provide opportunities for students to explore a variety of career fields. Responsibility for providing appropriate instruction is shared by all teachers, especially those with specialized preparation in career exploration.

The abilities, interests and aspirations of students provide the bases for identifying potential programs and patterns of vocational preparation at the secondary level of education. At this level vocational education curricula are designed to prepare youth to perform work that is responsive to human needs and wants. Vocational curricula must also reflect the varied manpower needs and job opportunities which are identified as broad program areas.

B. Guidelines for the Preparation of Vocational Education Teachers

There are no specific guidelines common to all Vocational Education programs

C. Common Competencies Needed by Vocational Education Teachers

1.0 In order to effectively plan vocational education programs, the teacher should be able to:

  1.1 Interpret and use employment and follow-up data and trends

  1.2 Design new and/or modify existing curricula based on identified vocational needs of students

  1.3 Develop and/or select course of study

  1.4 Conduct and distribute findings of community surveys

  1.5 Develop lesson plans, units of instruction, and performance objectives

  1.6 Evaluate and select instructional materials and equipment

  1.7 Organize and effectively use an advisory committee

  1.8 Conduct and analyze student-interest surveys

  1.9 Develop long-range plans for programs

  1.10 Design and prepare teacher-made instructional materials

  1.11 Plan, organize, and implement adult education programs

1.12 Plan for new and expanded instructional facilities

2.0 In order to effectively plan, organize, and advise vocational education student organizations, the teacher should be able to:

2.1 Design curricula to make student organizations an integral part of the instructional process

2.2 Develop an annual program of activities for youth organizations

2.3 Instill an appreciation for youth organizations in students, parents, and administrators

2.4 Coordinate youth activities in a multiple teacher department

2.5 Motivate students to accept leadership responsibilities

2.6 Train students for competitive activities

3.0 In order to effectively plan and conduct public relations activities for vocational education programs, the teacher should be able to:

3.1 Develop programs of work to include such activities as:

- writing news articles
- preparing and presenting radio and t.v. programs
- preparing and presenting programs to special interest groups
- preparing bulletin boards, brochures, displays, exhibits, and floats

3.2 Develop and conduct a recruitment program

3.3 Plan and conduct activities such as:

- awards programs
- socials
- banquets
- open house

3.4 Evaluate (and modify when necessary) public relations activities

4.0 In order to effectively plan and initiate a vocational guidance program, the teacher should be able to:

4.1 Identify sources of vocational information

4.2 Acquaint students with career opportunities

4.3 Assist students in developing employability skills

4.4 Instill in the students the importance of the work ethic in our society and the importance of vocational education for all youth

4.5 Adapt and modify student attitudes and skills in relation to our constantly changing society

4.6 Establish and maintain a positive rapport with the students

4.7 Recognize the need for appropriate referral for professional counseling

4.8 Deal effectively with moral issues

4.9 Use the perceptual skills of being aware, receiving, and listening to others

5.0 In order to effectively plan vocational education programs for classroom management, the teacher should be able to:

5.1 Operate classroom and instructional laboratory activities within a safe and efficient manner and in compliance with OSHA guidelines

5.2 Maintain, repair, or recognize the need for repair of instructional equipment and facilities

5.3 Instill an appreciation in students for a safe and clean instructional environment through maintaining an adequate housekeeping system

5.4 Develop and maintain an up-to-date list of instructional materials and equipment

5.5 Administer an instructional budget within State and local guidelines

5.6 Establish and maintain an information system

5.7 Select and maintain up-to-date instructional resource materials

5.8 Establish and maintain an adequate filing and record-keeping system

5.9 Maintain appropriate control of students for various learning environments

5.10 Provide appropriate instruction for individual student differences

5.11 Maintain an instructional environment conducive to learning which provides for sex equity, bilingual, and multi-cultural opportunities

6.0 In order to be aware of the historical development of vocational education, the teacher should be able to:

6.1 Demonstrate an understanding of the philosophic foundations of vocation

6.2 Trace the development of state and federal vocational education legislation

6.3 Interpret and explain vocational education legislation, rules, regulations, guidelines, and policies

6.4 Identify changing instructional and legislative trends in vocational education

7.0 In order to understand the work experience development of the instructional program, the teacher should be able to:

7.1 Perform skills in vocational areas related to the instructional program

7.2 Plan for, develop, and implement a cooperative education program

7.3 Select and coordinate appropriate cooperative job sites

7.4 Involve business and industry personnel in planning instructional programs

7.5 Supervise and coordinate cooperative work experience of students

7.6 Demonstrate skills in using equipment pertinent to instructional programs in a safe manner

8.0 In order to effectively evaluate vocational education programs, the teacher should be able to:

8.1 Design and develop an evaluation system to include planning and organizing an advisory committee

8.2 Collect and analyze appropriate follow-up data

8.3 Interpret diagnostic data

8.4 Implement reporting/follow-up data

8.5 Assess effectiveness of teacher and learning

8.6 Assess performance skills and effective behavior

8.7 Understand the relationship between handicapping conditions, student abilities, and vocational opportunities

9.0 Vocational Education -- Computer Competencies (Level II)

9.1 All Vocational Education teachers should demonstrate an understanding of basic concepts of computer hardware in relation to Vocational Education by:

9.1.1 Exhibiting a working knowledge of computer technology

9.1.2 Being prepared to set up a computer terminal

9.1.3 Exhibiting familiarity with the basic components of a computer system; i.e., input/output, storage, retrieval.

9.1.4 Performing computer operations: on/off sequence, loading/execute/saving/copying programs

9.1.5 Understanding the various types of computers and their designed tasks; e.g., "mainframe," "mini," and "micro" computers

9.2 Vocational Education Teachers should demonstrate a knowledge of Computer Assisted Instruction (CAI), Computer managed instruction (CMI), and Authoring Programs by:

9.2.1 Identifying, evaluating, and selecting software programs appropriate for classroom management (CMI); i.e., student enrollment, grades, classroom-related record keeping

9.2.2 Identifying, evaluating, and selecting software programs appropriate for clerical record keeping in the operation of the classroom/facilities (CMI); i.e., inventory of necessary consumable and non-consumable supplies, equipment, and materials, purchase requests, shop/lab data and analysis

9.2.3 Identifying, evaluating, and selecting software programs appropriate for instructional purposes in the Vocational Education Program (CAI) relative to the eight major areas described in the Competency-Based Curriculum: Prevocational, Agricultural, Business and Office, Marketing, Health Occupations, Home Economics, Industrial Arts, Trade and Industrial Education.

9.2.4 Being familiar with Authoring Systems and know how to use these specifically designed software programs for instructional purposes

9.3 The Vocational Education teacher should demonstrate an understanding concerning the use of peripheral devices for enhancing the computer as a creative instructional tool by:

9.3.1 Exhibiting a familiarity and an understanding for using additional input peripherals and the related software, such as: voice synthesizers, graphic tablets, mouse, joystick, modem, etc.

9.3.2 Knowing how Video Tape Recorders and Video Disk Recorders enhance Vocational Education experiences

9.3.3 Knowing how to select and use appropriate printers to produce "hard" copies of computer generated information

9.3.4 Exhibiting an awareness that technology is constantly changing; therefore, the individual professional must actively seek information pertaining to the on-going status of electronic instructional technology

In addition to the listed Electronic Instructional Technology competencies for Vocational Education, Business and Office Education should also include the following computer competencies:

9.4 Utilize computerized accounting systems and explain how they are integrated into the accounting process

9.5 Demonstrate proper techniques and skills in the operation of up-to-date keyboarding equipment, including typewriters and microcomputers

9.6 Design an information system -- including equipment, sources of information, and procedures -- to be used in the management decision-making process by:

9.6.1 Identifying equipment and procedures used in information systems

9.6.2 Identifying the impact of computers on management

9.7 Analyze the role of computerized data processing in our society and its implications for the future by:

9.7.1 Identifying business applications appropriately processed by a computer

9.7.2 Interpreting results of processed data applying reason and logic in evaluating the validity of results obtained

9.7.3 Distinguishing purposes and levels of computer hardware and software

9.7.4 Identifying features of a management information system

9.7.5 Describing various data storage and retrieval systems

9.7.6 Designing and preparing data for computer processing

9.7.8 Demonstrating proper techniques and skills in using various pieces of computer equipment

9.8 Analyze results of processed data applying reason and logic in evaluating the methods used and results obtained by:

9.8.1 Demonstrating the ability to execute package programs common to business

9.8.2 Demonstrating the ability to write in at least one business computer language and in BASIC

AGRICULTURAL EDUCATION

A. The Purposes of Agricultural Education in the School Curriculum

Agricultural education is a coordinated program of group and individual instructional activities consisting of classroom instruction, laboratory/shop exercise, Future Farmers of America program activities, and supervised occupational experience program activities designed to explore career opportunities and to develop competencies in individuals preparing to enter and advance in agricultural occupations.

The functions of agricultural production, agricultural supplies, agricultural mechanization, ornamental horticulture, forestry, natural resources, environmental protection, and related services are emphasized in the instructional program. A specific course or course sequence in agricultural education may include one or any combination of these functions.

The broad objectives for students enrolled in agricultural education are:

- To develop an understanding of and appreciation of career opportunities in the broad field of agriculture and the preparation needed to enter and progress in agricultural occupations
- To develop agricultural competencies needed by individuals preparing to engage in agricultural occupations
- To develop the ability to secure satisfactory placement and to advance in agricultural occupations through a program of continuing education
- To develop the abilities needed to exercise and follow effective leadership in fulfilling occupational, social, and civic responsibilities
- To participate in practical life experiences and activities which will assist them in planning, establishing, and maintaining a homestead and garden

An additional major program objective for agricultural education is to provide a continuing education program for out-of-school youth and adults

B. Guidelines for the Preparation of Agriculture Teachers

Subject Matter

Approximately 40 percent of the undergraduate program of preparing Vocational Agriculture teachers (including professional education peculiar to the area) should be devoted to agriculture in accordance with the following guidelines.

GUIDELINE 1: The program should provide a broad understanding of the biological, physical, and applied sciences as related to agriculture.

Preparation in this area should include integrated courses in the physical, biological, and applied sciences. Study in these areas should provide a foundation of knowledge of making practical solutions to agricultural problems.

GUIDELINE 2: The program should provide technical agriculture experiences sufficiently broad in scope and sufficiently flexible that students may study in several agricultural areas as identified in the catalog of competencies.

Technical agriculture courses in the curriculum should contribute to the ability of students to understand and solve agricultural problems concerned with managerial aspects. The ability to solve these problems effectively requires competencies in identifying problems, determining alternatives, and making decisions with a broad knowledge and understanding of agriculture. Opportunity should be provided for each prospective agriculture teacher to study in the following areas in addition to the fields of specialization: plant science; animal science; agricultural economics; marketing agricultural products; sociology; agriculture mechanics; and forestry.

GUIDELINE 3: The program should provide an opportunity for limited specialization based upon the agricultural curriculum in the public schools and individual interests.

The area(s) of specialization should be selected from agricultural mechanics, animal science, poultry science, soil science, plant science, horticulture, agricultural economics, forestry, or agricultural communications. The program should provide opportunity for specialization in one or more areas.

Professional Education

The professional education program should discover and develop the professional competencies necessary for a beginning teacher of agriculture and should comprise approximately 25 percent of the undergraduate program developed in accordance with the following guidelines.

GUIDELINE 4: The program should provide preparation in the areas of specialized professional competencies in sufficient depth to meet the identified catalog of competencies in the area.

Study should include the basic principles and theories of learning and how these are applied to vocational agricultural students at the secondary school level. Methods of determining students' aptitudes, needs, and interests should be a part of the skills attained by each student. Instruction should include methods of teaching, tools and equipment needed for programs, preparation and use of audio-visual materials, effective use of youth organization (FFA), creating an effective teaching-learning environment for secondary school pupils and adults, and developing supervised occupational guidance.

GUIDELINE 5: The professional education program should provide experiences for understanding the purpose, organization, and administration of school systems, with special emphasis on the role of the teacher in developing and directing learning environments related to vocational agriculture education for secondary school pupils and adults.

Preparation in this area should develop understanding of the organization and administration of the school, curriculum patterns, and the teacher's role in relating the school to the community. Emphasis should be placed upon establishment of a learning environment appropriate for the pupils. This includes understanding and using techniques and strategies in a variety of organizational settings, including adult farmer education programs.

GUIDELINE 6: The professional education program should provide an extended period of continuous full-time student teaching experiences in agriculture.

Preparation in this area should include a variety of experiences in the various functions of the teacher of agriculture in the secondary school program. Experiences should be acquired with all groups engaged in the learning processes, both in and out of school settings. The program should include planned observations and participation in school and community activities related to the instructional program.

C. Competencies needed by Teachers of Agricultural Education

Professional Values

1.0 In order to promote the agricultural education program to meet the needs and interests of students and satisfy employment demands, the teacher must be able to:

  1.1 Write a philosophy of agricultural education

  1.2 Describe the importance of agricultural education in relation to farm and off-farm occupations

  1.3 Collect and analyze data related to employment opportunities in the employment areas of the school and agricultural education objectives

  1.4 Collect and analyze data on social and economic changes to which agricultural education must respond

  1.5 Conduct and analyze student interest surveys

  1.6 Trace the development of agricultural education through State and Federal legislation

2.0 In order to plan for effective public relations, the teacher must be able to:

  2.1 Develop a program of work for public relations

  2.2 Involve resource personnel in the instructional program

  2.3 Plan and conduct an awards program, social, banquets, and open house

  2.4 Develop and conduct orientation and recruitment program(s)

  2.5 Collect and analyze data related to student placement

  2.6 Identify and describe the functions of agricultural agencies and farm organizations operating in the state

Professional Skills/Techniques/Methodologies

3.0 In order to plan for effective instruction, the teacher of agriculture should be able to:

- 3.1 Develop and select a course of study
- 3.2 Design units of instruction that enable students to develop competencies needed in agriculture/agribusiness occupations
- 3.3 Select and/or prepare instructional materials to meet individual needs of students
- 3.4 Select and effectively use community resources
- 3.5 Organize and implement an effective field trip

4.0 In order to manage the classroom and laboratories effectively, the teacher must be able to:

- 4.1 Formulate and operate within a budget
- 4.2 Select and maintain equipment needed for effective instruction
- 4.3 Plan classrooms and labs for maximum safety and effective instruction
- 4.4 Create and maintain an atmosphere conducive to effective learning
- 4.5 Maintain appropriate control of students for various learning environments
- 4.6 Organize and arrange instructional materials and supplies which will aid in effective teaching in the classroom and laboratory

5.0 In order to aid students in making career decisions, the teacher must be able to:

- 5.1 Identify sources of occupational information
- 5.2 Identify, use, and analyze student interest survey forms and preference tests
- 5.3 List factors to consider in making career decisions
- 5.4 Identify and demonstrate skills and techniques needed for job seeking, job interviews, and job applications
- 5.5 Identify competencies needed to enter and advance in agriculture/agribusiness occupations
- 5.6 Identify and describe post-high school educational opportunities related to agriculture and student interests and needs

6.0 In order to evaluate vocational agriculture programs and student progress, a teacher must be able to:

  6.1 Evaluate student progress in terms of behavioral objectives

  6.2 Prepare student assessment instruments

  6.3 Design an instrument which will evaluate criteria, objectives, and standards of the program

  6.4 Evaluate and select teaching materials

7.0 In order to use the vocational student organization (FFA) as an integral part of instruction to develop skills, the teacher must be able to:

  7.1 Trace the history and organizational pattern of the FFA

  7.2 Identify the aims and purposes of the FFA

  7.3 Develop a program of activities to involve and meet the needs of all students enrolled

  7.4 Identify and demonstrate basic skills in public speaking and parliamentary procedure

  7.5 Complete application forms for various FFA activities, awards, and degree advancement

  7.6 Incorporate FFA activities into the program of instruction

  7.7 Organize and maintain student records related to FFA work

8.0 In order to extend learning experiences for students beyond the classroom through the Supervised Occupational Experiences Program, the teacher should be able to:

  8.1 Identify and describe the four types of supervised occupational experiences

  8.2 Complete records necessary for all types of supervised occupational experiences

  8.3 Identify, define, and/or demonstrate business management terms and procedures related to supervised occupational experience programs

  8.4 Provide opportunity for extended learning activities with units of instruction

Content and Overall Knowledge

9.0 In order to plan and conduct a program of career exploration and guidance, and to provide hands-on learning experiences in technical agriculture, the teacher should be able to:

9.1 Animal Science

9.1.1 Identify and describe the distinguishing breed characteristics of farm animals grown for home and commercial use in North Carolina

9.2 Soil Science

9.2.1 Evaluate and classify land for agricultural and industrial uses

9.2.2 Describe the importance of land use and proper soil management in the national economy

9.2.3 Demonstrate proficiency in taking soil samples and interpreting results of soil analysis

9.3 Plant Science

9.3.1 Describe the fundamentals of the nature of ecology, plant growth, and plant propagation

9.3.2 Explain the relationship among plants, soil, and animals and their importance to the national economy

9.3.3 Demonstrate a knowledge of plants including trees used for the production of agricultural products

9.4 Agricultural Resources

9.4.1 Identify the main categories and sources of pollution of the environment

9.4.2 Describe at least three reasons for man to conserve natural resources

9.4.3 Identify at least three ways modern agricultural practices have improved the environment

9.4.4 Describe physical qualities of water and identify sources of safe water supplies for farm use

9.4.5 Identify and describe ten types of outdoor recreational activities

9.4.6 Identify and describe the effects of renewable agricultural resources on energy and environment

9.5 Agricultural Economics

9.5.1 Identify and describe the types of business organizations in a capitalistic economy

9.5.2 Identify the types of market producers used in buying and selling goods and services

9.6 Agricultural Mechanics

9.6.1 Demonstrate an understanding of the theory and principles of internal combustion engines

9.6.2 Identify and describe tools and equipment used in agriculture/agribusiness occupations

9.6.3 Identify and describe electrical terms, safety practices, and electrical supplies as related to agriculture

9.6.4 Identify and describe materials used in farm building construction

9.6.5 Identify and describe types of buildings used for producing, storing, curing, and processing agricultural products

9.6.6 Make a simple working drawing including picture of the object, dimensions, bill of materials, and steps in construction

9.6.7 Identify the parts and describe the functions for the following systems in small gasoline engines: compression, ignition, carburization, and lubrication

9.6.8 Identify and perform maintenance activities for small gasoline engines

Content and Overall Knowledge in Specialty Areas

10.0 In order to plan and conduct a program to develop knowledge and skills needed for job entry into agricultural production occupations and/or to pursue further training in the subject area, the teacher should be able to:

10.1 Plan and implement a pest control program for livestock and crop enterprises in North Carolina

10.2 Plan and implement a fertilization program for specified crops

10.3 Identify and classify weeds in North Carolina and plan a control program for each

10.4 Describe economic loss due to insect damage

10.5 Describe common plant diseases and symptoms of specified crops

10.6 Identify and describe methods of curing, drying, and storing specified crops

10.7 Plan and implement the most commonly approved production procedures for specified crops

10.8 Prepare a plan to control erosion on a given farm

10.9 Describe the functions of the feed nutrients for farm animals

10.10 Prepare a feeding, breeding, and management program for specified farm animals

10.11 Select, prepare, and show farm animals

10.12 Select, plan, and construct housing for farm animals

10.13 Analyze a farm business in terms of size of the business, crop and livestock program, financial returns to land, labor, and management

10.14 Take an inventory and prepare net worth statement

10.15 Determine the most efficient method of marketing, storing, and transporting farm products

10.16 Identify sources of farm credit and complete applications for loans

10.17 Plan and implement a safety program for the use of farm tractors and equipment

10.18 Lay out a small farm building

10.19 Prepare form for concrete, determining quantity needed

10.20 Mix, pour, and finish concrete

10.21 Plan and install plumbing in a farm building for livestock watering

10.22 Plan and install electrical service in a small farm building

10.23 Identify and describe the function of each part of an electric arc welder and equipment

10.24 Use an electric arc welder to cut and weld metal, to punch holes in metal, and build up worn parts

11.0 In order to plan and conduct a program to develop knowledge and skills needed for job entry into agricultural mechanics occupations, and/or to pursue further training in the subject areas, the teacher should be able to:

11.1 Explain the basic principles and concepts essential for the construction of farm buildings

11.2 Identify and use tools and supplies used in agricultural mechanics occupations

11.3 Demonstrate an understanding of building types, building design requirements, and construction techniques

11.4 Demonstrate skills needed in the construction and maintenance of farm buildings and equipment

11.5 Describe the fundamentals of electricity and its application to agriculture

11.6 Identify and describe types of electric welders and the function of parts of welders and demonstrate the use of welders for repairing broken parts, building up worn parts, and constructing small projects

11.7 Identify and describe parts of an oxyacetylene welding outfit and related materials and demonstrate the safe use of the welder to solder, braze, weld, fuse, cut, and punch holes in metal

11.8 Identify and describe types of files, cold chisels, tap and die sets, hacksaws, and tin snips and demonstrate the proper use of each

11.9 Solder metal with an electric soldering iron and with the use of a blow torch and/or propane torch

11.10 Diagnose, tune, repair, and maintain small gasoline engines

11.11 Describe the types and basic principles of internal combustion engines

11.12 Identify and describe the function of parts of farm buildings and fastening devices used in construction

11.13 Identify, describe advantages and disadvantages of, and install electric, barbed wire, woven wire, and wood fences

11.14 Define electrical terms

12.0 In order to plan and conduct a program to develop knowledge and skills needed for job entry into ornamental horticulture occupations and/or to pursue further training in the subject area, the teacher should be able to:

12.1 Identify ornamental horticulture plant materials

12.2 Plan and manage a greenhouse operation

12.3 Demonstrate methods of plant propagation

12.4 Identify and correctly use rooting and growth media

12.5 Identify and correctly use agricultural chemicals

12.6 Identify and know control of horticultural insects and diseases

12.7 Test soils and interpret soil test recommendations

12.8 Identify, establish, and maintain turfgrasses

12.9 Prune plants effectively

12.10 Demonstrate proficiency in operating and maintaining tools and equipment used in ornamental horticulture occupations

12.11 Demonstrate a proficiency in arboriculture

12.12 Demonstrate a proficiency in managing and growing greenhouse plants

12.13 Demonstrate a proficiency in landscape planning, establishment, and maintenance

12.14 Demonstrate a proficiency in the production of nursery plants

13.0 In order to plan and conduct a program to develop knowledge and skills needed for job entry into forestry occupations and/or to pursue further training in the subject area, the teacher should be able to:

13.1 Discuss the history and development of forestry in North Carolina and the United States

13.2 Identify trees common to the areas in relation to characteristics and growth requirements

13.3 Identify and explain the concept of a multiple-use forest in relation to national economy, environment, and employment opportunities

13.4 Demonstrate proper first aid techniques as may be needed in forestry occupations

13.5 Demonstrate proficiency in operating and maintaining forestry tools and equipment

13.6 Demonstrate techniques in forest establishment

13.7 Demonstrate proficiency in forest protection

13.8 Explain the concepts within a good forest management plan

14.0 In order to plan and conduct a program to develop knowledge and skills needed for entry into agricultural resources occupations and/or to pursue further training in the subject areas, the teacher should be able to:

14.1 Demonstrate proficiency in operating and maintaining tools and equipment used in agricultural resources occupations

14.2 Demonstrate proper management techniques for fish and wildlife as they relate to agricultural resources

14.3 Demonstrate a proficiency in forestry as it relates to agricultural resources

14.4 Demonstrate proficiency in soil conservation and management relating to agricultural resources

14.5 Identify proper techniques in water management as it relates to agricultural resources

14.6 Demonstrate a proficiency in air pollution control

14.7 Demonstrate a proficiency in managing outdoor recreation enterprises

14.8 Demonstrate proficiency in conducting a hunter safety program

14.9 Identify government and forestry organizations related to agricultural resources and explain services they provide

15.0 In order to plan and conduct a program to develop knowledge and skills needed for job entry into agricultural products and processing occupations and/or to pursue further training in the subject area, the teacher should be able to:

15.1 Identify and describe types of markets for agricultural products

15.2 Identify and describe the market classes and grades of beef and swine

15.3 Identify and describe storage facilities for agricultural products

15.4 Identify retail cuts of beef and swine

15.5 Identify and describe classes and grades of chickens and grades of eggs

15.6 Identify and describe standards and grades of milk and dairy products

VOCATIONAL BUSINESS EDUCATION

A. Nature of Vocational Business Education in the School Curriculum

Purpose

Programs of undergraduate study in business education are designed to prepare graduates as public school business teachers (including elementary, middle, junior high, high, and post secondary schools), teachers/trainers in business and industry, and other business and industry personnel in which applicants are required to have a business/teaching background.

Business education is a broad, comprehensive curriculum at the secondary level that provides students with meaningful instruction for and about business. Instruction in this program encompasses business skills and techniques, understanding of basic economics, and attitudes necessary to enable students to participate in our economy as wage earners and consumers.

The basic skills of reading, writing, economics, and computing undergird all business education courses. The program includes instruction in creating effective oral and written communication; preparing and analyzing financial records; managing cash flow; operating appropriate equipment to process, store, retrieve, and distribute alphanumeric data/information; developing skills and knowledge related to interpersonal behaviors and economic literacy; and performing other consumer and business related tasks.

Opportunities to develop and apply leadership, social, civic, and business-related skills are provided through the Future Business Leaders of America (FBLA), the vocational student organization for business education students. As an integral part of the business instructional program, FBLA activities enhance classroom instruction. These activities directly relate to the major objectives of business education.

At the middle grades and secondary school levels, programs in business education are designed to:

- Develop occupational skills necessary for initial employment and advancement in a business career.
- Develop economic understanding needed for intelligent participation in our economic system.
- Develop background information for further study in the field of business.
- Develop computer literacy for personal use and work-related environments.
- Develop abilities needed to exercise and follow effective leadership in fulfilling occupational, social, and civic responsibilities.

The expected outcome of a well-defined business teacher education program is expressed in the competencies needed for effective performance as a business teacher.

Certification

Business teachers must have a foundation in business studies which includes specific abilities and skills needed to succeed in business occupations. Foundational business studies are essential to develop: (a) an understanding of principles, practices, and procedures of business and economic concepts; (b) a foundation for effective performance in all aspects of business including office, service occupations, and business entrepreneurship; and (c) a subject-matter base for effective teaching of all business subjects.

Preservice teachers preparing to teach business subjects must attain proficiency in the area(s) in which they are seeking certification. There are two inter-related areas of certification in business education; 760--Vocational Business Education and 761--Vocational Business Education-Data Processing. The differences in the two areas are noted in the information processing, office operations, and technology competencies.

B. Program Guidelines

General Studies (1/3 of program)

GUIDELINE 1: The program should provide for basic knowledge and competencies in oral and written communication, awareness of the contributions of all segments of society, and an understanding of the nature of human behavior.

Study should include opportunities to demonstrate functional skills in oral and written communication as well as opportunities to refine such skills. Additionally, study under this guideline provides opportunities to learn about society and the nature of the learner.

GUIDELINE 2: The program should provide for emerging perspectives that are basic to a teacher's ability to make decisions, to develop an educated person, to contribute to the personal growth of students, and to the improvement of the teaching profession.

Teachers need a sound general education. General studies comprise approximately one-third of the undergraduate program in business education. These studies include such areas as communication skills, mathematics, social, natural and behavioral sciences, and humanities.

Professional Studies (1/6 of program)

GUIDELINE 3: The program should provide the content and background for enrichment of teaching, teaching/learning theory, and field experiences relevant to the student and professional objectives.

Understanding the educational process is necessary to be successful in the classroom. This understanding is gained through the professional studies component of the business education program. These studies include education foundation studies, teaching/learning theory, and early field experiences.

Professional Studies Unique to Business Education

GUIDELINE 4: The program should provide an understanding of the purposes, principles, and philosophies of vocational education, and the role of business education in the total school program.

Study should include matter dealing with the history and philosophy of vocational education from a Federal and State perspective, trends in business education, and the interrelationship of business education in the total school program.

GUIDELINE 5: The program should provide an understanding of curriculum development and teaching methods in business education programs.

Study should include the analysis of tasks performed in a business environment as a method of determining curriculum. Methods of teaching technical office skills, accounting, information processing, computer applications, and basic business subjects are to be covered.

GUIDELINE 6: The program should provide for the culmination of learning through the application of teaching/learning theories in the development of cognitive skills, motor skills, and affective skills relative to subject areas in the business education curriculum.

After the preservice business teachers achieve competence in general studies, background and enrichment in teaching, teaching/learning theory, and specialty area studies, a student teaching experience must be provided. Student teaching provides the opportunity for the preservice business teacher to assume responsibility for the full range of teaching duties in an actual school situation under the supervision of qualified personnel from both the college/university and the cooperating school.

Specialty Studies (1/2 of program)

GUIDELINE 7: The program should provide for developing proficiency with business and economic principles and applications essential to (a) effective performance in a business career and (b) effective participation in our economic system.

Study should include business communications, business law, computerized accounting, business information systems (including computer programming in BASIC), management, marketing, personal and business finance, entrepreneurship, and economics.

and

Proficiency in an additional programming language is required if seeking 761--Business Education-Data Processing certification.

GUIDELINE 8: The program should provide for the development of competencies in technical office skills, knowledge, and attitudes essential to the business environment.

Study should include development of skills at an acceptable employment level in keyboarding. Skills in the use of word processors and microcomputers should also be developed.

and

The development of competencies in a shorthand system and machine transcription if seeking 760–Business Education certification.

GUIDELINE 9: The program should provide relevant work experience in a contemporary business environment.

There should be a program that provides a minimum of 250 hours of supervised office-related work experience.

or

There should be documented evidence of at least one year, full-time or equivalent part-time, office related work experience within four years prior to a student's program completion.

Note: In situations where the work experience is more than five years old, there should be a college/university work observation program. This program should be designed to update the student's knowledge and understanding of current business policies and practices in a minimum of five businesses.

GUIDELINE 10: The program should provide an understanding of how to organize, administer, and evaluate business and office education programs.

Study should include using an advisory committee, establishing and managing a Future Business Leader chapter, evaluating textbooks, and selecting office equipment and materials.

GUIDELINE 11: The program should provide an understanding of the cooperative method of instruction.

Study should include an identification of the differences among work experience, internships, and the cooperative method of instruction. Selecting appropriate training sites, developing training plans, and student observation should be covered.

C. Competencies Needed by Teachers of Business Education

ACCOUNTING

1.0 Analyze the importance of the accounting function in the overall operation of a business

    1.1 Explain the need for and development of accounting

    1.2 Compare the accounting systems, procedures, and problems of various types of business organizations

2.0 Demonstrate an understanding of accounting procedures

    2.1 Record, summarize, and analyze transactions relating to the accounting cycle

    2.2 Prepare and analyze financial statements

- 2.3 Utilize computerized accounting systems and explain how they are integrated into the accounting process
- 2.4 Prepare financial records for accounting control systems, voucher, inventory, and budget
- 2.5 Analyze financial records used in various phases of business
- 2.6 Identify, record, and analyze business transactions applying appropriate accounting procedures

BUSINESS COMMUNICATIONS

3.0 Apply the theory and concepts of the communication process in business behavior

- 3.1 Describe basic concepts applicable to communicating
- 3.2 Adapt communication techniques appropriate to the reader's understanding

4.0 Compose effective business letters, reports, memorandums, and other kinds of business communication, demonstrating decision-making skills in solving business communication problems

- 4.1 Demonstrate proficiency in language structure and mechanics
- 4.2 Demonstrate proficiency in composition by the selection and organization of content and format

5.0 Demonstrate decision-making skills in solving business communication problems

- 5.1 Apply the decision-making process in the selection of appropriate communication media
- 5.2 Explain the impact of technology on the transmission of communication

6.0 Demonstrate effective oral and nonverbal communication skills

- 6.1 Identify effective elements of oral communication skills
- 6.2 Identify effective elements of nonverbal communication skills

BUSINESS WORK EXPERIENCE

7.0 Obtain a minimum of 250 hours of business-work related work experience under instructor supervision

- 7.1 Identify the nature of work performed in a specific business occupation
- 7.2 Identify current business practices for a specific business occupation

7.3 Identify current technological practices and procedures used in business environments

7.4 Exhibit interpersonal skills with co-workers, supervisors, subordinates, and clients

7.5 Cope with stress, pressure, and frustrations that are a part of a business environment

ECONOMICS

8.0 Analyze economic principles as they relate to consumers, producers, and government

8.1 Describe the role of the consumer and business firms in the American economy

8.2 Contrast the roles of individuals, business firms, and government in different economic systems

8.3 Describe the fundamental factors operating in micro-economic analysis

8.4 Describe the fundamental factors operating in macro-economic analysis

8.5 Describe how personal decision-making affects the utilization of economic resources

8.6 Identify the relationship of the Federal Reserve System to commercial banks

8.7 Describe the role of the Federal Reserve System relating to monetary policy

8.8 Describe the economic effects of fiscal policy

8.9 Describe the economic effects of monetary policy

8.10 Explain the relationship of governmental services to taxation

8.11 Identify the effects of international activity on the American economy

FINANCE

9.0 Analyze the sources available for financing business organizations

9.1 Compare the process involved for securing funds for proprietorship, partnership, corporation, and a cooperative

9.2 Identify the types of financial institutions

9.3 Explain the types of financial services offered to meet the needs of a changing society

9.4 Explain the value of capital assets as a form of security

9.5 Describe the impact of available government loans on financing a business

9.6 Identify safeguards designed to protect consumers who utilize services of financial institutions

10.0 Analyze the importance of credit to our economy

10.1 Explain the role of credit

10.2 Explain the advantages and disadvantages of long-term or short-term credit

10.3 Identify the causes and effects of bankruptcy

11.0 Analyze the importance of insurance, savings, and budgeting as they relate to proper management of personal finances

11.1 Identify characteristics of different types of insurance

11.2 Identify institutions that have a role in providing services in the areas of transfer of funds, credit, saving, and investment

11.3 Demonstrate the ability to plan and budget personal finances

11.4 Identify and explain different types of saving and investment

INFORMATION PROCESSING

12.0 Identify and describe information processing fundamentals as they exist today, their purpose, their overall importance, their societal and business uses, and their implications for the future

12.1 Identify basic hardware components of a computer system. Explain what each component does and why the component is essential to the successful operation of the computer system

12.2 Identify specialized hardware components that may be needed for specialized computer applications, such as desktop publishing and graphics

12.3 Identify operating system commands and the purpose for which each command is used

12.4 Explain why information processing has become an integral part of management development and business operations

12.5 Identify the various information processing careers and describe the education, training, and specific knowledges and skills needed to perform these jobs effectively and efficiently

13.0 Explain the various uses of equipment, materials, software and computers regarding effective information processing

  13.1 Identify the procedural steps to be followed in investigating, designing, and implementing an effective information processing system

  13.2 Demonstrate and/or illustrate effective keyboarding skills and techniques as basic tools of information processing and explain their use

  13.3 Identify and demonstrate steps in the information processing cycle, including the inputting and processing of data, and outputting of information. Identify specific activities included in each step of the cycle

  13.4 Demonstrate and/or illustrate word processing, spreadsheets, database, and graphics applications for processing information using both separate and integrated programs

  13.5 Explain the characteristics of telecommunications, electronic mail, desktop publishing, and graphics presentation and illustrate their uses in the processing of information in business and other aspects of society

14.0 Analyze various information processing activities and the related computer program applications

  14.1 Explain why software is an essential components of a computer system

  14.2 Assess and describe the value of various information processing computer programs being used today

  14.3 Demonstrate the ability to write programs in BASIC

  14.4 Describe and/or illustrate the characteristics and value of different programming languages as they are applied in various information processing operations

  Note: The following competency (14.5) must be completed if requesting 761–Vocational Business Education-Data Processing

  14.5 Demonstrate the ability to write programs in a second business computer language

LEGAL

15.0 Analyze the role of the American legal system in business

  15.1 Describe the American legal system and court structures that relate to the creation, regulation, and operation of business organizations

  15.2 Identify alternative methods available for settlement of a dispute

15.3 Describe the basic aspects of criminal and tort law as they apply to the business environment

15.4 Describe the general principals relating to the law of contracts, agency and employment, organizational structures, and property rights, giving consideration to social and political influences in these matters

MANAGEMENT AND MARKETING

16.0 Demonstrate an understanding of management's role in the American economy

16.1 Identify the major types of business organizations, and explain various managerial structures for each type of business organization

16.2 Explain the managerial functions of planning, organizing, leading, and controlling a business enterprise

16.3 Explain the importance of marketing, purchasing, banking, credit, and insurance as related to successful business operations

16.4 Analyze the role and impact of labor unions on the management activities

16.5 Identify career opportunities in management

17.0 Analyze the personnel management function in business

17.1 Identify the factors involved in the recruitment, selection, training, promotion, and evaluation of employees in business

17.2 Relate personnel productivity to effective and efficient management, compensation, and benefits

17.3 Identify strategies and techniques of goal-setting

18.0 Design an information system for use in the management decision-making process

18.1 Identify equipment and procedures used in management information systems (MIS)

18.2 Relate office operations to the objectives of a business

18.3 Identify the impact of computers on management

19.0 Analyze the role of marketing in the American economy

19.1 Identify the relationship of the marketing function to other areas of business activity such as finance, accounting, and economic analysis

19.2 Describe the various channels of distribution of goods and services in the American economy

19.3 Compare the costs of marketing with the costs of producing goods and services

19.4 Discuss the marketing activities related to purchasing, displaying, advertising, and selling

19.5 Describe the role of consumerism in the American economy

19.6 Identify government regulations related to the marketing functions

METHODOLOGY

20.0 Demonstrate the use of effective methods, specialized techniques, instructional procedures, and educational media in the presentation of business subjects

20.1 Identify resources for teaching technical office skills, computerized information processing, and basic business subjects

20.2 Prepare units of instruction and lesson plans for specific business courses

20.3 Use simulations and live projects in teaching/learning situations

20.4 Select teaching/learning strategies and education media for individualized instruction, small group activities, and special needs students

20.5 Coordinate FBLA activities within the business education curriculum

20.6 Assess current trends in business and office education for inclusion into the curriculum

20.7 Recognize psychological and social factors affecting the acquisition of skills and knowledges as they relate to business and office education

20.8 Arrange business classrooms to simulate an office environment and to facilitate student work performance

21.0 Evaluate textbooks, equipment, and materials to be used in business and office education

21.1 Determine the types of instructional equipment needed for business courses

21.2 Prepare short- and long-term purchase plans

21.3 Maintain an up-to-date inventory of instructional resources

OFFICE OPERATIONS AND TECHNOLOGY

22.0 Demonstrate proficiency in using electronic input devices

22.1 Perform at industry standards the touch method of keyboarding

22.2 Produce documents in acceptable business formats

22.3 Use proper techniques and skills in the operation of state-of-the-art office equipment

23.0 Process information with proficiency by using different types of equipment, services, and materials

23.1 Compare communication services in terms of importance, installation, and operational factors

23.2 Analyze records management systems for use in various business environments

23.3 Select appropriate equipment and supplies needed to perform administrative support services

24.0 Analyze the functions and interrelationships of departments or systems in a business organization

24.1 Identify the types and functions of offices as they relate to the total operation of businesses

24.2 Describe how the type and size of a business determines office organization

25.0 Exhibit interpersonal skills, work habits, and attitudes that are accepted in business

26.0 Demonstrate proficiency in recording and transcribing shorthand

26.1 Write dictated materials in a system of writing short at a minimum rate of 80 words per minute

26.2 Transcribe dictated materials in acceptable format

27.0 Demonstrate ability to dictate

27.1 Dictate at specific speeds

27.2 Dictate using office-style dictation

ORGANIZATION AND ADMINISTRATION

Note: The following two competencies (28.0 and 29.0) must be addressed if requesting 760–Vocational Business Education

28.0 Explain the philosophy and major developments of business education in the total educational process

28.1 Explain the overall philosophy, purposes, and goals of business education in the public middle grades and secondary schools

28.2 Identify the relationship of business and office education to the total educational process

28.3 Identify State and Federal legislation affecting business and office education and other vocational education program areas

29.0 Organize and administer a business education program

29.1 Identify the administrative structure of business education at the local, regional, and State levels in North Carolina

29.2 Identify strategies for planning and evaluating a business education program at the middle grades and public secondary school level

29.3 Select an appropriate scope and sequence, having a balance of skill development and economic principles, to meet student needs and job market demands

29.4 Describe appropriate procedures for conducting placement and follow-up of graduates who complete business education programs

29.5 Design a public relations program for business education utilizing school and community

30.0 Implement the cooperative method of instruction in business education programs

30.1 Identify the components of the cooperative method of instruction

30.2 Assess the business employment needs in a community

30.3 Identify criteria for the selection of training stations for business education students

30.4 Coordinate classroom instruction with on-the-job training

31.0 Identify the purposes of and effectively utilize a business and office education advisory committee

31.1 Describe an appropriate composition of an advisory committee

31.2 Prepare an advisory committee program of work

32.0 Establish or maintain an active FBLA chapter

32.1 Describe the administrative structure of FBLA at the local, state, regional, and national levels

32.2 Describe the procedures for organizing an FBLA chapter

32.3 Describe how FBLA can be used as an instructional strategy in all business courses and as a strategy to develop leadership qualities

33.0 Design a business education curriculum

  33.1 Establish criteria for developing a curriculum

  33.2 Develop a schedule that will allow for maximum use of available resources

SECTION II

A. Purpose of Graduate Study in Vocational Business Education

The program of graduate studies should prepare professionals for competency in teaching, curriculum development, evaluation, research, and supervision of business curricula. Graduate studies in business education must be built on a sound foundation of adequate undergraduate study. The program of study for each student is jointly planned by the student and a member of the business teacher education faculty and must provide opportunities for depth and breadth of study in the areas specified in the guideline. The sponsorship of each thesis or field of study is the responsibility of a member of the business teacher education faculty with specialization in the area of the thesis or field of study.

B. There are no specific graduate Vocational Business Education guidelines.

C. Graduate Studies Competencies

1.0 Curriculum Development

  1.1 Design new and/or modify existing curricula based on identified occupational trends and projections

  1.2 Develop curriculum guides for business education courses

2.0 Evaluation

  2.1 Design and develop an evaluation system of vocational education with specific emphasis on business education

  2.2 Integrate diagnostic and follow-up data

  2.3 Assess effectiveness of teaching and learning

  2.4 Understand the relationship among handicapping conditions, student abilities, and occupational opportunities

3.0 Supervision

  3.1 Establish criteria for the selection of instructional materials, supplies, and equipment

3.2 Participate in planning, budgeting, and implementing a program for the acquisition, maintenance, and periodic replacement of equipment and furniture

3.3 Identify and use effective procedures to evaluate management techniques to improve classroom operations

4.0 Research

4.1 Apply the results of education research, develop concepts of research, and interpret professional literature which address research

4.2 Design research to solve professional problems in a scientific manner

CAREER EXPLORATION

A. Purpose and Objectives of the Program as Incorporated in the School Curriculum

The overall purpose of the Career Exploration Program is to provide exploratory learning experiences to assist students in developing their educational and occupational plans. Specific objectives of the Career Exploration program are to provide:

- Activities designed to enable each student to appraise his/her abilities, potentials, interests, desires, and needs. Access to a qualified counselor to provide assistance in understanding these in relation to future opportunities is essential
- Learning experiences which assure that each student can identify occupational opportunities (local, State, national) and understands the implications of a mobile labor force for a future worker
- Individualized and group instruction and related services as needed to allow each student to verbalize methods for entry into the labor market or entry into post-secondary education programs
- Opportunities to nurture creativity and to engage in activities designed to develop problem-solving skills
- Opportunities to participate in planned activities dealing with the economic system by which goods and services are produced, processed, and distributed
- Instruction and/or activities designed to develop desirable attitudes toward work and to recognize the dignity of every occupation
- Opportunities which are designed to allow each student to experience success and to develop personal pride
- Opportunities to engage in activities which are designed to familiarize the student with occupational education at the high school and post-high school levels
- Opportunities to identify major occupational categories or clusters and participate in activity experiences in each category or cluster (including work tasks involved, trends, educational, and training requirements)
- Activity experiences that assist the student in developing a positive self-concept
- Occupational information, laboratory, and other exploration activities integrated into all subject areas
- Career information and student self-appraisal on a group and individual basis
- Laboratory experiences for exploring basis skills in the fifteen occupational cluster areas

B. Guidelines for the Preparation of Career Exploration Teachers

GUIDELINE 1: The program should prepare prospective teachers with a basic knowledge of career information.

Preparation under this guideline should provide sufficient concentrated study to assure that competency is developed in locating, evaluating, storing, retrieving, and using career information (including occupational information, educational information, and personal-social information). Occupational trends, life styles associated with occupations and occupational levels, and the psychological and sociological aspects of work should be understood by the prospective teacher.

GUIDELINE 2: The program should provide prospective teachers with an understanding of the concepts of vocational development and vocational maturity.

Concentrated study in this area should assure that teachers understand self-concept theory, are able to identify characteristics associated with various stages in the process of vocational development, and demonstrate competence in planning and/or prescribing activities which promote vocational maturity in students.

GUIDELINE 3: The program should provide for the development of basic skills in three or more career cluster areas.

Preparation under this guideline would require courses in technical subject-matter areas. These should be sufficient to assure that prospective teachers can plan, direct, and coordinate appropriate exploratory activities in career cluster areas.

GUIDELINE 4: The program should provide for the development of competencies in the specific methods, strategies, techniques, tools, materials, and curricula needed by the career exploration teacher in working with students both in the school and the community.

The program should include study in the philosophy and objectives of career exploration programs and contemporary trends and issues influencing these programs. Content in this area should include materials, methods, and strategies in the development of learning; development and measurement of student skills; the use of effective teaching procedures; selection, preparation, and use of learning resources for specific areas and levels of career exploration; identification and use of community resources; and other appropriate content.

The program should include experience in which the prospective teacher learns to solve problems concerning organization, administration, classroom management, and classroom instruction. The opportunities should be provided for teachers to learn to plan and equip career exploration laboratories, to maintain the equipment and facilities, and to develop appropriate course content.

GUIDELINE 5: The program should assure that prospective teachers acquire first-hand information about several occupations through a variety of work experiences, a part of which should be supervised by the teacher education institution.

Preparation under this guideline would require work experience opportunities for students as a part of their teacher education program. These should be sufficient to assure that prospective teachers have exposure to the world of work in a number of occupational cluster areas.

C. Competencies Needed by Career Exploration Teachers

1.0 Content information–In order to effectively teach prevocational concepts, the beginning teacher should be able to:

- 1.1 Explain the philosophy and purposes of Prevocational Education
- 1.2 Describe the laboratory organization for a comprehensive program
- 1.3 Define vocabulary frequently used in Prevocational Education
- 1.4 Explain several occupational groupings including the 15 occupational clusters identified by the U. S. Office of Education
- 1.5 Explain career ladder and lattice networks as they apply to career development
- 1.6 Use a variety of resources for occupational information
- 1.7 Identify tasks of various occupations in areas of specialization
- 1.8 Identify aptitudes needed for various occupations in areas of specialization
- 1.9 Identify education and training requirements needed for areas of specialization
- 1.10 Describe skill requirements for a variety of occupations in areas of specialization
- 1.11 Show the relationship between basic skills and skills required in occupations
- 1.12 Relate indicated occupational interests and aptitudes to employment opportunities
- 1.13 Explain how occupational opportunities follow economic trends
- 1.14 Discuss the role which work plays in providing for self-concept development of individuals
- 1.15 Explain how an individual's value system and lifestyle relate to occupational selection
- 1.16 Identify the decision-making process necessary in educational and occupational choices
- 1.17 List high school vocational programs that are pertinent to projected needs of students
- 1.18 Describe a variety of methods of managing a prevocational laboratory

Exploration Management

2.0 In order to effectively organize and manage the prevocational laboratory, the beginning teacher should be able to

- 2.1 Develop performance objectives consistent with student competencies for the program area
- 2.2 Adapt available materials for implementation
- 2.3 Develop materials for implementation
- 2.4 Utilize a variety of techniques to organize work stations for students to explore occupations
- 2.5 Employ experiences to teach self-appraisal skills
- 2.6 Integrate simulated or real job experiences with occupational information activities
- 2.7 Conduct class experiences to promote transfer of learning between job tasks and the job cluster
- 2.8 Employ experiences which require tentative decision-making
- 2.9 Implement evaluative techniques which help students relate specific feelings about job task to occupational goals

HEALTH OCCUPATIONS EDUCATION

A. The Purpose and Nature of Health Occupations Education

The secondary, comprehensive Health Occupations Education program in North Carolina attempts to meet present and predicted needs for health workers within the diverse occupations identified in the health field. The program is designed to stimulate and motivate students' interests in the health services industry and then help them prepare for job opportunities as assistants on the health team. Courses are designed to utilize skills training as a means of teaching a common core of concepts pertinent to the pursuit of a health career.

The competency-based curriculum for Health Occupations Education uses the cluster approach and encompasses both instructional and laboratory experiences which are aimed at developing conceptual understandings of personal, family, and community health maintenance and disease control, ethical and legal aspects, consumer treatment, and rehabilitation of diseases/disorders. A multiplicity of simple to complex outcome competencies that represent commonalities within the scope of various health occupations are applied by students through clinical internship with cooperating health agencies.

Opportunities for leadership development and application of learned instructional competencies are provided by means of student participation in the North Carolina Association of Health Occupations Students of America (HOSA). This student organization is an integral component of the Health Occupations Education instructional program.

As an integral part of the total secondary school curriculum, Health Occupations Education programs are designed:

- To enable male and female students to select a career in the health care delivery system best suited to their individual needs, abilities, and career objective(s).
- To enable male and female students to develop and apply basic core competencies as non-credentialed health assistants that will prepare them with entry level skills for immediate employment.
- To enable male and female students to develop and apply basic core competencies that will prepare them for pursuit of a health career through further education.

B. Guidelines for the Preparation of Health Occupations Educators

GUIDELINE 1: The prospective Health Occupations Education teacher shall be an actively credentialed health professional in the state of North Carolina and who has successfully demonstrated the identified teaching competencies.

Since prospective Health Occupations Education teachers will have already completed the technical requirements of a health career, these guidelines will apply almost entirely to professional teaching competencies.

Health professionals who have no less than an associate degree or a comparable credential in their respective health career will need to have additional college preparation. This preparation component must include recognized professional teaching competencies before being fully qualified for a vocational certificate in Health Occupations.

GUIDELINE 2: The professional teacher education program or component for Health Occupations Education should provide an in-depth understanding of the philosophy, goals, and objectives of the public school system and more specifically the role of the vocational education teacher in that system.

Fundamental to the teaching and learning process is the educational philosophy of the teacher. Prospective Health Occupations Education teachers, because of their orientation to the health services industry, must experience a transfer of philosophical role and responsibility from that of a practitioner to that of a professional educator.

GUIDELINE 3: The professional teacher education program or component for Health Occupations Education should provide an in-depth understanding of school and health systems with special emphasis on the role of the Health Occupations Education teacher.

Preparation in this area includes the following areas: school purposes, organization and administration, curriculum patterns, accreditation, teacher certification, guidance and placement, health industry trends, organization and arrangement of health care systems, employment opportunities, and salary ranges for health workers.

GUIDELINE 4: The teacher education program should provide an in-depth understanding of the legal aspects of teaching and of representing one agency (public schools) when supervising learning experiences in another agency (Health Services Industry).

Effective coordination of student clinical internships is founded on prospective Health Occupations Education teachers being able to apply precision communication and management skills. Such collaboration between educational and health related agencies represents both legal and liable concerns. These arrangements are contingent upon the establishment of a compatible agreement in the form of affiliation contracts.

GUIDELINE 5: The professional teacher education program or component for Health Occupations Education must provide for the application of recognized Health Occupations Education teaching competencies which include, but not limited to, diagnostic and prescriptive skills, teaching/learning strategies, program/classroom management skills, teaching of reading skills, evaluation and testing skills, curriculum organization and development skills, and health promotion/maintenance/care skills.

With the change of role from health practitioner to professional educator, the prospective Health Occupations Education teacher must acquire those skills necessary to the delivery of effective and efficient instruction. The successful quality of a Health Occupations Education program is dependent on a combination of well executed professional teaching competencies.

C. Competencies Needed by Teachers

1.0 Analyze the meaning of health/wellness using the World Health Organization's definition

- 1.1 Using a criteria checklist, assess your own personal health habits/values as they relate to the World Health Organization's (WHO) definition
- 1.2 Using selected resources, assess the local community health/wellness based upon the WHO definition as a criteria
- 1.3 Describe at least three aspects of health maintenance/care within a given community using the following criteria:
  - 1.3.1 Type of agency
  - 1.3.2 Organizational structure
  - 1.3.3 Services rendered
- 1.4 Given a hypothetical patient case study, objectively analyze the documented behavioral changes as influenced by a health care/maintenance environment

2.0 Analyze the health care delivery system using the following criteria: (1) historical development; (2) influences on the system; (3) types of health care maintenance environments; and (4) impact of national trends on health care delivery

- 2.1 Describe at least three societal attitudes/patterns of health care/maintenance that evolved between the 17th and 19th centuries
- 2.2 Describe at least three major periods in the development of American health care/maintenance, including the major changes that occurred in each
- 2.3 Explain at least five kinds of inpatient/residential health agencies, including the type of services provided
- 2.4 Compare at least five resources of ambulatory care by relating the type of service afforded
- 2.5 Differentiate the role of public health at the Federal, State, and local levels
- 2.6 Define health care in respect to the terms primary, comprehensive, triage, and tertiary
- 2.7 Discuss the relationship between a given country's political system and the type of health care delivery system that exists
- 2.8 Describe how the educational system influences the health care delivery system
- 2.9 Explain how division of labor affects the health care delivery system

2.10 Explain how the economic level of a country affects the health care delivery system

2.11 Describe at least four salient differences between a national health care plan and the current health care delivery system

2.12 Explain how a national health care plan may affect the demand for health team members in a health care delivery system

3.0 Analyze at least fifty health occupations

3.1 Explain the health career ladder concept

3.2 Given a list of at least fifty health occupations representing a variety of health career ladders, analyze each according to the following criteria:

3.2.1 primary role(s) of health team member

3.2.2 education preparation

3.2.3 available preparational programs in North Carolina

3.2.4 employment placement(s)

3.2.5 physical requirement(s)

3.2.6 intellectual requirements

3.2.7 credentialing requirement(s) for practice

3.3 Using current employment data, statistically project employment opportunities in the state of North Carolina for health team members of selected health services

3.4 Given a list of predicted trends in the health care delivery system for the next decade, predict at least five categories of health team members to be needed

4.0 Demonstrate the guidance/counseling process as related to student assessment for health career decision-making

4.1 Given the results of standardized tests that measure achievement, aptitude, and interest, apply an interpretation of the data to a student's potential for a health career

4.2 Analyze the results of non-standardized tests that measure goals, commitment, values, and interest as they relate to a student's potential for a health career

4.3 Given a list of health occupations and student assessment data, match the data to the most appropriate health occupation(s)

4.4 Given a hypothetical student health career decision and data from testing, apply the guidance/counseling process to include assisting the student in seeking health career information based on their existing assets.

5.0 Analyze the ethical/legal components of an identified health team member's role and responsibility in the delivery of health care/maintenance services

5.1 Describe at least four ethical codes with respect to health care/maintenance

5.2 Explain at least four laws governing the delivery of health care/maintenance services by identified health team members

5.3 Relate the importance of confidentiality to ethical/legal roles/responsibilities of health team members

5.4 Interpret the legal and ethical implications of "The Patient's Bill of Rights."

5.5 Given an exemplar, describe the ethical codes/legal responsibilities as they relate to the health team member's role/responsibility to both patients/clients and to other health team members

6.0 Apply medical terminology as it relates to structure, meaning, and correct usage

6.1 Given a list of at least 50 medical terms, synthesize their meanings through the identification of structural parts

6.2 Given an exemplar, assess the medical terminology, as it applies to correct or incorrect usage

7.0 Apply the metric system with respect to linear measurements and computation of liquids and solids

7.1 Given a list of at least 10 different measurements related to patients' physical assessments using the English system, convert each applying the metric system

7.2 Given at least 10 problems relating to the measurement of liquids and solids, compute each applying the metric system

7.3 Evaluate the metric system in lieu of the English system of measurement

7.4 Given the appropriate equipment and supplies and an exemplar, apply the procedure for handling/measuring liquids/solids (i.e.; specimens, smears, cultures) using the metric system and identification labels

8.0 Describe the diagnostic process as it incorporates the five elements of problem-solving/decision-making

8.1 Describe the diagnostic process utilized in the delivery of health care services

8.2 Given a hypothetical patient/client chief complaint and case history using the five elements of problem/solving/decision-making, describe the appropriate process for determining a diagnosis

9.0 Interpret data collected in the diagnostic process as they relate to normal and abnormal values

9.1 Describe at least five different kinds of data acquired in the diagnostic process

9.2 Given a hypothetical patient case history, explain the data components as each relate to defined normal/abnormal research values

10.0 Compare the relationship of pathogenic organisms in the human body to their respective causative disease(s)/disorder(s)

10.1 Given at least five prepared microscopic slides with different species of pathogenic organisms and using the microscope, describe each according to the following:

10.1.1 structure

10.1.2 classification

10.1.3 etiology

10.1.4 method of prevention

10.1.5 affect on body systems

10.1.6 method of treatment (control and/or destruction)

10.2 Contrast active and passive immunity

10.3 Discuss at least thirty terms related to pathogenic organisms and their application to the disease/disorder process

11.0 Analyze the body systems according to their normal structure and function and their response to major diseases and disorders to include the skeletal, muscular, respiratory, circulatory, lymphatic, nervous, urinary, endocrine, and reproductive systems

11.1 Describe the interdependence of the individual body systems (functions and structures) while maintaining physical/chemical homeostasis

11.2 Given at least ten diseases/disorders, classify each according to definition, etiology, affect on body systems, diagnostic tests, treatment, care, rehabilitation, and prognosis

12.0 Analyze the appropriate body systems (skeletal, muscular, respiratory, circulatory, lymphatic, nervous, urinary, endocrine, and reproductive) as affected by alcohol, addictive drugs, tobacco, and environmental pollutants

12.1 Describe at least five emotional/physical effects of alcohol on the body systems

12.2 Given at least five addictive drugs, compare the potential effects of abuse with the normal prescribed usage

12.3 Relate at least three degrees of smoking tobacco (light, moderate, heavy) to the affects on body structure and function

12.4 Given at least one example each of noise, water, air, and chemical pollution, explain the detrimental effects on humans including the body systems affected, means of diagnosing, treatment, care, rehabilitation, prognosis, and means of elimination

13.0 Apply effective communication processes in the delivery of health care/ maintenance including the following components: observation skills, listening skills, verbal skills, and non-verbal skills

13.1 Explain the role of observation as a part of a health team member's method of communication

13.2 Demonstrate the communication skill of the "active listening"

13.3 Differentiate between verbal and non-verbal communication

13.4 Given an exemplar, apply effective communication skills including the following: observation, listening, verbal, and non-verbal behavior

14.0 Apply at least nine appropriate clerical skills as they relate to the effective and efficient management of a health agency

14.1 Apply the procedures for handling mail in a multi-departmental health agency

14.2 Apply the procedure for maintaining files/records in a given health agency to include both alphabetical and numerical processes

14.3 Apply the procedure for scheduling medical appointments in a given health agency

14.4 Given an exemplar, apply the procedure for acquiring patient/client information using the interviewing techniques

14.5 Apply the procedure for maintaining an inventory that includes, but is not limited to, supplies and equipment

14.6 Given an exemplar, apply the procedure for maintaining a bookkeeping system in a given health agency to include, but is not limited to, debits, credits, bill paying, bank deposits, and tax assessment

14.7 Given an exemplar, apply the procedure for accurately transcribing a physician's orders for an identified hospitalized patient

14.8 Given appropriate information, apply the procedure for organizing health team member's assignment schedules for an identified health agency (i.e., Radiology - organizing requisitions for Gastro-Intestinal Series - upper and lower)

14.9 Given an exemplar, apply the procedure for admitting a patient/client to an identified health agency

15.0 Apply at least five patient/client assessment measures in the diagnostic process

15.1 Apply the procedures for measuring/recording a patient/client's vital signs

15.2 Apply the procedures for measuring/recording the weight of a patient/client using both the metric and English systems

15.3 Apply the procedures for measuring/recording the height of a patient/client using both the metric and English systems

15.4 Apply the procedure for measuring/recording visual acuity using a given visual chart; i.e., Snellen Chart

15.5 Given an exemplar, apply the procedure of observing/recording a patient/client's external physical characteristics to include, but not limited to, nose, eyes, hair, and skin

16.0 Apply medical asepsis as related to individual, patient/client, and environmental protection

16.1 Apply the procedure for medical aseptic handwashing

16.2 Given the appropriate equipment and supplies, apply the appropriate procedure for disinfection

16.3 Given the appropriate equipment and supplies, apply the procedure for handling that prevents contamination

16.4 Given an exemplar, apply the procedure for disinfection of skin sites

16.5 Given an exemplar, apply the appropriate isolation procedure that prevents cross-contamination of contagious diseases/disorders

17.0 Apply surgical asepsis as related to individual, patient/client, environmental protection

17.1 Apply the procedure for surgically aseptic handwashing

17.2 Apply the procedure for surgically donning clothing appropriate to a sterile environment; i.e, gown, gloves, mask, etc.

17.3 Given the appropriate equipment and supplies, apply the procedure for sterilization

17.4 Given the appropriate equipment and supplies, apply the procedure for handling that prevents contamination

17.5 Given an exemplar, apply the procedure for surgically preparing patient/client operative sites

18.0 Apply accepted safety practices in at least four procedures that transport patients/clients

18.1 Apply the procedure for transporting a patient/client from the bed/table to a wheelchair and from the wheelchair to the bed/table using safety practices that protect the persons involved

18.2 Apply the procedure for transporting a patient/client from the bed/table to a stretcher and from the stretcher to the bed/table using the safety practices that protect the persons involved

18.3 Apply the procedure for transporting a patient/client from the bed/wheelchair/stretcher to a hydraulic lift and from the hydraulic lift to the bed/wheelchair/stretcher using safety practices that protect the persons involved

18.4 Apply the procedures for ambulating a patient/client with and without devices using safety practices that protect the persons involved

19.0 Maintain an appropriate health care environment as related to comfort, health, and safety of the inhabitants

19.1 Given an exemplar, apply the procedure for adjusting the environmental temperature to the comfort, health, and safety of the inhabitants

19.2 Given the appropriate equipment and supplies, apply the procedure for maintaining a clean health care environment

19.3 Given an exemplar, apply the procedure for maintaining a safe/accident-free health care environment

19.4 Given an exemplar, apply the procedure for control of unnecessary noise within a health care environment

20.0 Apply at least six direct patient care skills as related to aligning/positioning, hot/cold applications, therapeutic agents, hygiene, exercise, and emergency care

20.1 Given an exemplar and appropriate equipment and supplies, position/align a patient/client to include, but not limited to, the following:

20.1.1 physical examination

20.1.2 dental examination

20.1.3 x-ray

20.1.4 total patient care

20.1.5 veterinary care

20.2 Given an exemplar, apply the appropriate/legal procedure for a hot/cold application using accepted safety practices that eliminate injury to the patient/client

20.3 Given the appropriate equipment and supplies and a professional health team member's order, apply the legal procedure for assisting in administering therapeutic agents to include, but not limited to:

20.3.1 inhalants

20.3.2 intravenous agents

20.3.3 gavage

20.4 Given an exemplar, apply the procedure for hygienic care to a patient/client requiring total care

20.5 Given an exemplar and a professional health team member's order, assist in applying the legal procedure for active/passive exercise of a patient/client

20.6 Given an exemplar, apply the appropriate emergency first aid procedures to include, but not limited to:

20.6.1 cardiopulmonary resuscitation (CPR)

20.6.2 control of bleeding

20.6.3 control of choking

20.6.4 emergency transport

20.6.5 dressing/bandaging

20.6.6 positioning

20.6.7 splinting

20.6.8 poisoning

HOME ECONOMICS

A. Purpose and Objectives of the Program as Incorporated in the School Curriculum

Traditionally home economics was elected by high school students in grades nine through twelve desiring some training in homemaking skills. Recent social and economic conditions and technological changes prompted a more critical look at the relevance of instructional emphases for home economics. Based on these, program objectives were developed to include career awareness and exploration in the middle, junior and senior high schools; and expanded at the junior and senior high school levels to include consumer and homemaking skills for the multiple roles of homemakers and wage earners.

The home economics education program is comprised of consumer and homemaking and occupational skills training and has as its primary objectives:

- to prepare males and females to effectively manage roles of consumer, homemaker, marriage partner, parent, and to maintain compatible relationships with others outside the family unit
- prepare students for entry level employment or advanced training in home economics related careers

The several content areas generally considered as home economics related in the public schools of North Carolina are foods and nutrition; consumer education and management; housing, equipment and furnishing; child development and interpersonal relationships; health and safety; and clothing selection, construction, and care. Consumer management skills are interwoven throughout each of these content areas.

B. Guidelines for the Preparation of Home Economics Teachers

In order to provide the prospective teacher with competencies in planning, organizing, and implementing instruction, the home economics preparation program should be planned in accordance with the following guidelines:

GUIDELINE 1: The program should provide for the study of human growth and family development. It should include studies that provide a broad knowledge of the nature and needs of individuals at all developmental levels.

Specialized study in the nature of human growth and family development should include the following: the functions and patterns of the family in society; patterns of physical and behavioral development of the individual and styles of living as influenced by social, cultural, political, and economic variables; and roles and responsibilities of individuals and families interacting with the environment.

GUIDELINE 2: The program should provide study in the identification of human and material resources and the application of principles and skills for managing resources for the welfare of individuals and families.

Specialized study of human and material resources which may satisfy basic human needs should include the following concepts: principles in the selection, construction, use and care of fabrics and other materials in clothing and accessories; principles of the nutritive, aesthetic, cultural and social uses of food; principles of form and function in shelter, furnishings, and equipment; and principles and practices useful in promoting health. Specialized study in consumer education and management should include alternative patterns of behavior in the preservation or use of human and natural resources as affected by differing psychological, physiological, economic, and social conditions.

GUIDELINE 3: The program should provide for further development of major home economics concepts through opportunities for individualized selection of advanced studies from among combinations of complementing home economics areas and related fields.

A broadly defined home economics concept shall be selected by the prospective teacher based on interest, aptitude, and/or the projected teaching environment. Since the concept is broadly defined, studies should be chosen from either a combination of home economics areas or home economics and related fields.

GUIDELINE 4: The program should orient the prospective teacher to job classification and competency requirements for clusters of home economics related careers and provide for on-the-job work experience and course work in at least one of the occupational clusters.

Opportunities should be provided for the prospective teacher to acquire knowledge of jobs and the specific tasks involved in the areas of child care service, clothing service, food service, health and management services, and home furnishing services. Laboratory experience, practicums and field experiences in business, industry, and other community agencies designed to increase knowledge of the world of work and develop occupational skills should be an integral part of the program.

GUIDELINE 5: The program should provide for the development of competencies in diagnosing learning needs, developing effective teaching strategies, evaluating pupil progress, and managing the learning environment to achieve specific behavioral outcomes in home economics education.

The program should include study of the objectives of home economics programs for youth and adults as well as contemporary trends and issues influencing these programs. Characteristics and needs of individuals and families should be the focal point of instructional planning.

The program should provide the prospective teacher with knowledge and skills needed to (1) determine learning and program needs; (2) determine relevant objectives and select content, learning experiences, and evaluative procedures which are valid for the objectives specified in child development; family and interpersonal relationships; clothing and textiles; consumer education and management, housing, home furnishings, and equipment; grooming, personal appearance and health, and home care of the sick; food and nutrition; and career orientation; (3) develop and use strategies for individualizing instruction; (4) manage resources and the instructional environment to enhance the teaching-learning process; (5) plan and implement instructional experiences for persons of different ages and genders and from various social, cultural, economic, and ethnic backgrounds; (6) guide students in career planning through exploration and orientation experiences; (7) plan and implement programs for the development of entry-level skills for employment in home economics related occupations; and (8) use experimental approaches in teaching to improve program effectiveness in meeting observed student needs.

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C. Competencies Needed by Teachers to Achieve Program Objectives

Human Development

1.0 Interpret principles of human development

- 1.1 Relate the characteristics of the growth and development process to different stages or ages of individuals
- 1.2 Recognize factors affecting interrelationships among physical, social, intellectual, moral, and emotional aspects of growth that contribute to total development of an individual
- 1.3 Identify hereditary and environmental factors which promote or hinder individual growth and development
- 1.4 Associate characteristics of individual maturity with each stage of the life cycle: physical, intellectual, emotional, social, and moral
- 1.5 Analyze individual growth and development on basis of research on individual differences
- 1.6 Describe characteristics of an individual functioning at optimal potential at various stages of the life span
- 1.7 Describe means by which a positive self-concept can be developed and maintained at various stages in the life cycle
- 1.8 Relate the impact of guidance to the total development of the child
- 1.9 Assess the difference between gender roles and expressions of human sexuality
- 1.10 Analyze factors that contribute to a person's understanding and acceptance or rejection of his/her sexuality
- 1.11 Assess patterns of heterosexual love relationships
- 1.12 Differentiate between sexuality and procreation
- 1.13 Identify biological similarities and differences in male and female
- 1.14 Analyze family planning/population concerns as they relate to economic, social, and intellectual development of individuals, families, and cultures
- 1.15 Illustrate the relationship between optimum development of individuals and barriers resulting from other prejudicial attitudes of race, sex, age, body appearance, income, and religion which limit this development
- 1.16 Analyze the effects of values held by individuals on family socialization and interaction processes

2.0 Analyze factors which influence quality of personal and family relationships under varying conditions

2.1 Analyze characteristics of various family forms existing in our society

2.2 Assess the interdependence existing among the family, society, and individuals

2.3 Assess the means by which an individual's developmental tasks can be accomplished in various life-styles

2.4 Analyze the effect of various parenting styles on human growth and development of the child

2.5 Identify effects of cultural patterns that are transmitted from one generation to another (social, moral, etc.) on development and function of individual and society units

2.6 Analyze the effects of societal and technological change on the structure and functions of families

2.7 Identify effects of changes in family structure on individual development

2.8 Identify services available from individual and family support systems in the community

2.9 Identify environmental factors that influence family well-being

2.10 Analyze the effects of emerging roles and life styles on the socialization of children and self-actualization of individuals

2.11 Identify ways individuals adapt to situations and strive to balance human behavior

2.12 Recognize communication patterns that contribute to positive interpersonal relationships

2.13 Formulate alternatives for coping with or eliminating factors which place stress on individuals and families

2.14 Identify influences of the self-concept upon interactions with others at various stages in the life cycle

2.15 Assess factors in a marital relationship which promote optimum social, emotional, and intellectual development of an individual

2.16 Assess the effects of the multiplicity of roles (i.e., husband/wife, parent, work) and varying role priorities upon family relationships

2.17 Assess the relationship between social-emotional maturity of husband and wife and marital stability

2.18 Assess factors such as divorce, separation, adoption, and working mothers upon the social-emotional development of the young child

3.0 Analyze factors influencing preparation for parenthood

3.1 Analyze consequences (economic, physical, psychological) of choice to have/not to have a child for both parent(s) and the child

3.2 Identify complications of pregnancies associated with special age groups (adolescents, older women)

3.3 Analyze factors involved in adequate prenatal, postnatal, neonatal, and infant care

3.4 Analyze the interaction of physiological and psychological conditions on the parent/infant relationships

Management and Consumer Economics

4.0 Implement principles of management

4.1 Determine the role of management in achieving goals related to each of the content areas of home economics

4.2 Recognize differences among individuals and families in relation to values, standards, and goals

4.3 Apply the decision-making process in designing, implementing, and evaluating plans for the allocation and use of resources to meet needs and to achieve personal and family goals

4.4 Use management concepts and skills to identify and evaluate resources to be used for obtaining goods and services that will provide personal and family satisfactions

4.5 Analyze the relationship between values and decision-making as well as the role of values in self-development

4.6 Identify his/her own values and behavior related to these values

4.7 Analyze managerial processes in special situations of individual and family needs (handicapped, elderly, single heads of households, low income households) to determine effects on quality of life

4.8 Develop joint decision-making skills as applied to families and groups

4.9 Value the management process as a tool for achieving individual and family goals

5.0 Indicate influence of economic, governmental, and environmental factors on consumer choices and decision-making

  5.1 Evaluate the ecological effects of consumption assessing the individual's responsibilities for conserving resources

  5.2 Describe the services of private and governmental agencies and organizations that are available to families (credit, financial security, insurance)

  5.3 Describe the legislation that protects the rights of individuals and families

  5.4 Describe the rights and responsibilities that are legitimately the consumers in improving the marketplace

  5.5 Identify ways consumers can become involved in the formation of public policy relating to consumer concerns

  5.6 Locate, evaluate, and process information as it relates to consumer choices

6.0 Evaluate the interrelatedness of the consumer and the total economy

  6.1 Analyze the relationship between the consumer and the economy with regard to factors that influence behavior in the marketplace

  6.2 Describe basic economic concepts and principles as applied to the total economy

  6.3 Interpret the concept of government taxation

  6.4 Review the world monetary system

  6.5 Review the world market system

Food and Nutrition

7.0 Apply knowledge of food nutrients, their functions, and their sources to meal planning and food selection

  7.1 Interpret the significance of food as related to cultural and socio-economic influences

  7.2 Identify the composition of food and its function in the body throughout the life cycle

  7.3 Interpret nutrition and its relationship to the well-being of the individual

  7.4 Apply knowledge of factors causing changes in the properties of foods as a result of method of preparation

  7.5 Identify the relationship between chemical composition and physical properties of foods and their relationship to the acceptance, appearance, and use of foods

7.6 Interpret the significance of food practices as they relate to psychological and physiological well being

7.7 Evaluate sources of information concerning nutrition

8.0 Plan, prepare, and serve nutritionally adequate meals

8.1 Integrate factors of time, money, skill, and energy available in planning nutritious and attractive meals for a wide variety of situations based on the efficient use of time, money, skill, and energy

8.2 Select food service plans appropriate for given situations

8.3 Recognize principles of organization and management in the arrangement and use of kitchen, facilities, and equipment

8.4 Demonstrate skill in the selection, use, and care of food preparation equipment

8.5 Exhibit skill in the preparation of quality food products

8.6 Demonstrate principles and specialized techniques of food preservation

8.7 Demonstrate safe and sanitary procedures in the production, processing, handling, and storing of food

8.8 Recognize ways of conserving energy in the use of equipment for food preparation

8.9 Use management techniques in food preparation

9.0 Recognize factors influencing food supply and consumption

9.1 Analyze the relationship between the technological and the sociological developments within society on the production and consumption of food

9.2 Recognize the interrelationships among food marketing practices, consumer interests, food acceptance, nutritional needs, and use of consumer resources in affecting food supply and consumption

9.3 Analyze the roles of industry and Federal, State, and local agencies in establishing standards for food production and marketing

9.4 Recognize factors affecting selection and purchase of foods for individuals and families

Clothing and Textiles

10.0 Analyze factors that influence the acquisition and use of clothing/apparel and textile products

10.1 Apply art elements and principles of design in the acquisition and use of apparel and textile products

10.2 Evaluate the physical aspects of clothing/apparel and textile products that contribute to the protective environment of persons

10.3 Evaluate the properties and characteristics of textiles in relation to anticipated use and care

10.4 Analyze the cultural, social, and psychological factors that influence the acquisition and use of clothing/apparel and textile products

10.5 Analyze economic factors which influence market choices among textiles products and male/female clothing including patterns of production, distribution, and consumption

10.6 Identify alternative means of acquiring, using, and caring for clothing/apparel and textile products in relation to values, defined goals, life styles, and available resources

10.7 Evaluate the trade-offs among time, money, and aesthetic values in decisions to make, repair, alter, and recycle garments and other textile products

11.0 Recognize basic principles of clothing construction

11.1 Choose techniques and sequences of fabric preparation, cutting and marketing of pattern pieces, construction, and pressing that are compatible with fabric and garment design

11.2 Assess ready-made and/or constructed garments for quality of construction

11.3 Define criteria to use in the acquisition and care of sewing equipment

12.0 Exhibit skills in clothing construction

12.1 Perform basic skills necessary to use and alter patterns, construct and fit simple garments, and to make simple repairs and alterations

12.2 Demonstrate ability to select and use equipment for the construction and maintenance of personal and family clothing/apparel

12.3 Use management techniques in clothing construction

Housing and Home Furnishings

13.0 Indicate factors which affect housing choices and the influences of housing on the well-being of individual and families

13.1 Analyze the needs, values, and standards of families affecting the selection and use of housing, home furnishing, and equipment

13.2 Assess housing alternatives available to individuals and families

13.3 Analyze the legal and financial aspects of obtaining housing for different lifestyles

13.4 Understand the relationship of the housing industry to the economic welfare of the nation

13.5 Analyze local, State, and Federal policies as they influence a family housing choice

13.6 Examine the influence of lifestyle, family size, and stages in the family life cycle on selection of types of housing, furnishing, and kinds of equipment

13.7 Indicate the physiological, sociological, and psychological factors influencing selection of housing and home furnishings

13.8 Explain the effect of technological developments, availability of materials, and changes in design emphasis on the aesthetics, construction, and function of housing and home furnishing

13.9 Describe available community-based support services related to housing

14.0 Analyze the interrelationships of available resources and the management of these resources to maximize satisfactory living environments for individual families

14.1 Plan for maintenance of living space, furnishings, and equipment

14.2 Analyze the selection and arrangement of furnishings, equipment, and storage facilities as a means of achieving aesthetic pleasure, optimum comfort, convenience, and safety

14.3 Propose creative solutions in achieving aesthetic satisfaction in the near-environment

14.4 Assess energy-efficiency aspects of housing and equipment selection

14.5 Appraise health, safety, and care practices in relation to the use of space, equipment, and furnishings in the home

Career Orientation

15.0 Analyze opportunities for careers in home economics

- 15.1 Identify employment opportunities and occupations related to all home economics related areas
- 15.2 Identify skills, training, and education requirements for occupations in home economics related areas
- 15.3 Identify work attitudes, human relations skills, and management skills that facilitate and maintain employment
- 15.4 Identify ways home economics equips students to assume one or multiple roles

16. Relate knowledge of safety and sanitation to procedures for preparing, holding, and serving food

- 16.1 Recognize safe and sanitary procedures in food preparation and service
- 16.2 Select and maintain institutional equipment and facilities for safety and sanitation

17.0 Analyze efficient methods of food production and service

- 17.1 Select equipment for optimal use
- 17.2 Describe utilization of motion and time studies to determine efficient work methods
- 17.3 Plan arrangement of work areas and equipment for optimal use
- 17.4 Describe a variety of styles of portioning and meal service

18.0 Maintain control of costs in all phases of food service operation

- 18.1 Develop specifications and determine amounts of food and non-food items to be purchased
- 18.2 Determine cost of menu items and utilize techniques for recipe and portion control to maintain a given cost level
- 18.3 Utilize accounting and record keeping procedures in maintaining control of costs

19.0 Relate nutritional, psychological, sociological, and cultural factors to meal planning, preparation, and service

- 19.1 Describe food sources, functions, and requirements of nutrients as affected by age, sex, and condition of stress
- 19.2 Prepare menus for groups with special needs, (i.e., the aged, school-aged children)

- 19.3 Relate social, psychological, and physiological factors to food choices in commercial setting

20.0 Plan menus which are interesting and palatable and fit within budgetary limitations

- 20.1 Plan menus which effectively utilize equipment available
- 20.2 Determine food preferences of clientele
- 20.3 Plan menus using attractive and interesting food combinations
- 20.4 Plan menus at varying cost levels

21.0 Produce high quality food using quantity food production methods

- 21.1 Exhibit skill in the efficient preparation of quality food products using safe and sanitary procedures
- 21.2 Analyze causes of variation in quality of food products due to preparation, storage and preservation methods
- 21.3 Evaluate food quality and analyze recipe formulas and procedures to improve food production

Teacher Aide/Child Services

22.0 Develop positive interpersonal relationships with children

- 22.1 Apply positive guidance principles with children
- 22.2 Apply established criteria for helping children develop a positive self-concept
- 22.3 Communicate in a positive way with children

23.0 Establish criteria for the physical facilities of a Child Care Center

- 23.1 Evaluate indoor and outdoor equipment to facilitate growth and development of young children
- 23.2 Establish a stimulating environment both indoors and outdoors
- 23.3 Establish criteria for providing a safe environment
- 23.4 Interpret Federal and State laws governing the establishment of a Child Care Center

24.0 Plan programs for Day Care Centers, Nursery Schools, and Playschools

- 24.1 Relate purposes to types of programs found in Child Care Centers

24.2 Plan a variety of daily schedules for Child Care Centers

24.3 Evaluate various types of food services used in Child Care Services

24.4 Select activities and materials which stimulate social, intellectual, physical, and creative development at different age levels

25.0 Describe procedures for establishing and operating a Child Care Center

25.1 Identify the structure of responsibilities within the Child Care Center

25.2 Analyze various economic means available for developing and maintaining a financially sound center

25.3 Analyze the principles of time and energy management essential to the effective management of a Child Care Center

25.4 Recognize importance of flexibility and sensitivity in operating a Child Care Center

26.0 Relate the child's participation in the Child Care Center to his/her home life

26.1 Describe ways of interpreting a child care program to parents

26.2 Develop plans for involving parents in a child care program

26.3 Identify family influences on children's activities, attitudes, and behavior in a Child Care Center

Clothing/Home Furnishing Services

27.0 Select textile products for use in clothing and home furnishing products

27.1 Demonstrate skill in selecting fabrics for home furnishings in relation to art principles, furniture styles, intended use, and care requirements

27.2 Select textile products for apparel based on art principles, figure types, pattern design, and intended use

27.3 Recognize current fashion trends in clothing and home furnishings

28.0 Construct, alter, and repair clothing and/or home furnishing items involving the use of fabrics

28.1 Use techniques of fabric preparation, construction, alterations, and pressing that are compatible with fabric and garment design and meet standards for a salable garment

28.2 Make discriminating clothing construction choices related to compatibility of component parts, construction sequences, fabric stability, and shaping in order to produce quality garments

28.3 Interpret commercial patterns in the construction of clothing using a variety of fabrics and designs

28.4 Analyze fit for men, women, and children of pattern or garment, prescribing appropriate alterations

28.5 Perform appropriate alterations on clothing for men, women, and children

28.6 Prescribe the appropriate repairs on clothing for men, women, and children

28.7 Perform the appropriate repairs on clothing for men, women, and children

28.8 Produce home furnishing items which incorporate design principles, fabric characteristics, and construction techniques appropriate for the item

28.9 Determine applicability of various construction details and techniques used for home furnishing items involving fabrics

29.0 Utilize business management principles in Clothing/Home Furnishings Services

29.1 Determine monetary compensation for the product based on time, energy, and skill involved

29.2 Determine cost of materials needed for different home furnishing items

29.3 Determine the advisability of repairing or altering garments based on a knowledge of fabrics, design, time, and expense involved

29.4 Determine feasibility of re-upholstering or slip covering based on quality and design of the furniture items and cost in terms of money, time, and energy

29.5 Use appropriate bookkeeping methods and other procedures and equipment related to retail sales

30.0 Operate and maintain equipment used in Clothing/Home Furnishing Services

30.1 Operate and perform simple maintenance procedures on specialized sewing and pressing equipment needed for alteration and construction of ready-to-wear and home sewn garments

30.2 Exercise safety procedures in the operation and maintenance of various pieces of equipment used in Clothing/Home Furnishing Services

30.3 Use specialized equipment pertinent to the construction of home furnishing fabric items

Human Services

31.0 Related work to individuals and families with varying life styles

- 31.1 Recognize variation in lifestyles of individuals and families in different socio-economic levels and cultural contexts
- 31.2 Identify variations in standards as a basis for performing work within the range of standards acceptable to employers
- 31.3 Relate social, emotional, and physical needs of specific groups to their care
- 31.4 Indicate effects of reaction to stress on family functioning

32.0 Exhibit managerial and performance skills necessary for human service work

- 32.1 Exhibit decision-making skills which facilitate task performance within the framework of employer goals
- 32.2 Develop plans for sequencing of tasks to provide efficient use of time, energy, and equipment
- 32.3 Evaluate choices of goods and services with reference to quality, intended use and care, cost, and relative importance in meeting wants and needs of individuals and families
- 32.4 Use and care of appliances, utensils, and tools to promote safety, economy, and task accomplishment in relation to individual or family circumstances
- 32.5 Integrate factors of time, money, skill, and energy available in planning nutritious and attractive meals to meet needs of employers
- 32.6 Determine maintenance and care needed for textile products
- 32.7 Integrate factors of time, money, skill, and energy available in the performance of cleaning tasks

33.0 Use principles of safety and sanitation for self and clients

- 33.1 Utilize the principles of safety which relate to the handling and storage of materials used in the home and institutions
- 33.2 Identify accident prevention techniques
- 33.3 Apply skills in basic first aid and home nursing
- 33.4 Describe procedures for attaining sanitary conditions for self and clientele
- 33.5 Relate social, emotional, and physical needs to the safety of clientele

34.0 Incorporate a Code of Ethics, a sense of responsibility, and positive attitude into home and community service occupations

  34.1 Develop guidelines for ethical behavior working with the public

  34.2 Identify social agencies which provide assistance to individuals and families

Cooperative Home Economics

35.0 In order to understand the work experience development of the instructional program, the teacher should be able to:

  35.1 Incorporate competencies developed by a vocational education subcommittee

  35.2 Involve business and industry personnel in planning and evaluating instructional program

  35.3 Develop policies to serve as flexible guidelines in the selection of the home economics students for occupational programs

  35.4 Assist the students according to their vocational interest, aptitude, and ability in selecting the most appropriate on-the-job training placement for them

  35.5 Know labor laws relevant to placement of occupational students

TECHNOLOGY EDUCATION

A. Purpose and Nature of Technology Education Instruction in the Secondary School Curriculum

Recognizing that American culture is distinctly characterized as technological, it is the function of the school to give every student an insight and understanding of the technological nature of the culture. Technology Education strives to develop such literacy about technology through study of the evaluation, application, and significance of modern technology and its relationship to industrial systems including organization, personnel, resources, techniques, and products. Further, an understanding of the impacts of technology with regard to individuals and the society in both a present and future timeframe is developed. In acquainting individuals with their technological environment, technology education enables the individual to make rational decisions about their lives on a day-to-day basis and to eagerly participate in controlling his/her own destiny.

Technology education instruction draws on the individual's native potential for reasoning and problem solving, for imagining and creating, for constructing and expressing with tools and materials--commensurate with his/her abilities.

Specifically, technology education teaches children about technology and its use in extending the human potential. In doing so, students are helped to:

1. Know and appreciate the importance of technology
2. Apply tools, materials, processes, and technical concepts safely and efficiently
3. Adjust to a changing technological environment
4. Understand and adapt to those forces that influence the future
5. Develop problem-solving and decision-making abilities using human and material resources, processes, and technological systems
6. Develop creative abilities, positive self-concepts, and individual potential in technology
7. Relate other school subjects to technology, thereby preparing themselves for lifelong learning in a technological society
8. Make informed career choices
9. Become more sophisticated consumers of the goods and services of a technological society

Junior High/Middle School

The middle/junior high school program is exploratory in nature, providing opportunities for children to apply technological concepts learned in the elementary school. The past-present-future orientation of study in the seventh and eighth grade program provides an evolutionary perspective of the development of technology--its tools, materials, processes--and its use in the advancement of human life conditions. The courses provide instruction that may be applied to several objectives--advanced education, leisure, consumerism, and economic participation in society's work.

Senior High School

Senior high school technology education provides further opportunities for study in technology--either as continued study from middle/junior high school or as first-time enrollees in the program. The focus of instruction is toward providing preparation in technology that may be applied toward advancing in education (pretechnical), professional and in transferable skills for life (consumer, leisure, work) and continued lifetime learning.

There are eighteen (18) semester-length instructional offerings at the high school level organized around identified technological systems. The semester courses provide students flexibility in designing personal programs to meet individuals interests and objectives.

B. Guidelines for the Preparation of Teachers in Technology Education

The program for the preparation of technology education teachers should be a closely integrated system of courses and experiences with approximately 40-45 percent of the four-year undergraduate curriculum devoted to instruction in accordance with the following guidelines:

GUIDELINE 1: The program should provide for study of basic principles and concepts in the following technological systems: manufacturing, communications (graphics and electronic), construction, and transportation with opportunity to develop advanced knowledge in at least one system.

This guideline recognizes for preparation the fundamental elements of breadth and depth in competencies relating to technological adaptive systems associated with secondary school technology education programs. In addition to broad experience in all technological systems, the program should provide opportunity for more concentrated study in at least one system. The program should be inclusive of studies in technological systems and their role in extending human potential through the use of the tools, materials, and processes of technology. Further, study should include functional and organizational aspects of industry. In addition, the program should provide study in the sociological, economic, and ecological aspects of technology. Finally, the program should provide for the development of a background in the technical sciences, such as statics and strengths of materials.

The program should provide for both theoretical and laboratory experiences. Theoretical principles should be rested in basic mathematics and science and further studied in their application to a variety of laboratory problem-solving activities.

The program should also provide opportunities for the development of technical skills that will enable the future teachers to construct prototypes, mathematical and scientific models, industrial models, and other materials/forms; to diagnose malfunction problems properly; to set and adjust mechanical products for satisfactory performance; to operate and service instruments, tools, and machines for peak operation; and to build jugs and fixtures for fabrication activities.

GUIDELINE 2: The program should provide broad experiences for developing skills in the processes of planning, design, and the graphic communication of ideas to others; competencies in using scientific processes in solving problems with the tools and processes of technology; and ability in analyzing and evaluating solutions to technological problems.

The implementation of instructional activities that fulfill supporting objectives for technology programs requires special teaching competencies that this guideline identifies. These competencies ensure familiarity with special teaching methods and course organization techniques that have been adapted to unique applications in this discipline of study. Specifically, the program should provide opportunities to develop skilled techniques in oral, written, and graphic forms of expression through studies in English composition, speech, technical writing, and visual communications. It should also be inclusive of experiences that develop skill in analyzing, planning, organizing, sythesizing, and evaluating in relation to technological elements through such activities as entrepreneurship and innovation, research and experimentation, and in engineering and constructing products of the technological society. Finally, the program should provide opportunities to develop skilled techniques in researching, interpreting, documenting, and reporting results of technological studies.

GUIDELINE 3: The program should provide for the development of managerial skills in the operation of a technology education laboratory; competencies in maintaining the physical environment of the laboratory; a safety system embracing attitudes, skills, and understanding for engaging in technological activities; and competencies in planning and equipping technology education laboratory facilities.

The competencies included in this guideline are those necessary to create, manage, and maintain a safe environment in which the learning is to occur. The guideline's corequisites embrace those knowledges and skills necessary to manage and maintain a laboratory wherein students may work safely with the tools and materials of the technological society.

Specifically, the program should provide instruction in the development of a system of safety inclusive of laboratory planning, selection of appropriate tools and instruments, as well as the organizing and managing of the instructional program. Of paramount importance are the emphases to be devoted in the program to the development of safe work habits and the acquisition of safety attitudes.

GUIDELINE 4: The program should develop understanding of the time-place perspective in the evolution of contemporary technology.

The program should develop understanding of historical antecedents to contemporary interpretations of technology. Emphasis should be given to the development of a broad historical background embracing the interrelatedness of other educational disciplines. The program should also provide for orientation to the trends of technological development by indicating something of the future. The program should include study of the social, cultural, economic, and ecological impacts of technology, especially as it influences man–his present and his future.

GUIDELINE 5: The program should develop competencies in educational strategies including curriculum construction, lesson planning, methodology, evaluation, and the development and usage of appropriate educational technology to achieve desired learning outcomes in technology education.

The program should develop understanding and skills in planning, teaching, and evaluating technology activities at the senior high school level.

The program should provide experiences in planning that center on the development of competencies related to the use of systematic approaches to curriculum structure and course development. Included should be learning activities designed to enable the prospective teacher to determine learning needs within the parameter of individuals' educational and societal expectations, to define program goals, to delineate course objectives in terms of learning outcomes, and to develop curriculum plans and courses of study.

The program should provide experiences in laboratory and classroom teaching that stress competencies needed in selecting and using teaching strategies most appropriate to the realization of specified objectives.

Practicum experiences should be provided with strategies recommended for teaching technology education in the secondary school. Likewise, the activity-based approach should be used for developing competencies in the development and use of educational technology in instruction. Experience should also be provided in the use of group instructional strategies, including unit studies, research, and experimentation. Additionally, experiences should be provided for helping students learn through self-paced instruction accommodating individual learning styles.

The program should provide experiences in evaluating that address methods of judging both course efficiency and competencies needed for preparing and using a variety of tests for measuring student performance against course objectives. To judge program effectiveness, competencies need to be developed for comparing program goals with student performance in whatever activity the student elects upon graduation.

C. Competencies Needed by Technology Teachers (in addition to the core competencies for all vocational teachers)

1.0 Demonstrate knowledge that technology education provides a curriculum consistent with current research findings for curriculum design

    1.1 Demonstrate knowledge that technology education is based on a sound mission statement with stated goals and objectives which reflect the intent of technology education and be able to:

        1.1.1 Describe the intent of technology education

        1.1.2 Identify and explain a mission statement for technology education

        1.1.3 Identify and explain goals and objectives for technology education

1.2 Demonstrate knowledge that technology education is based on an organized set of concepts, processes, and systems that are uniquely technological and be able to:

- 1.2.1 Identify a conceptual framework for the study of technology
- 1.2.2 Identify the major processes related to technology
- 1.2.3 Identify and describe the functions and interrelated aspects of technological systems

1.3 Demonstrate knowledge that the study of technology is reflected in curriculum design, course outlines, instructional strategies, and evaluation of student work and be able to:

- 1.3.1 Develop course outlines to reflect North Carolina technology education curriculum
- 1.3.2 Identify the following significant instructional strategies appropriate for teaching technology education:
    - 1.3.2.1 Role-Play
    - 1.3.2.2 Anthropological
    - 1.3.2.3 Problem-solving
    - 1.3.2.4 Research and Experimentation
    - 1.3.2.5 Simulations
    - 1.3.2.6 Educational technology assisted instruction
    - 1.3.2.7 Competition based instruction
- 1.3.3 Identify a variety of evaluation techniques appropriate for monitoring student work in technology education courses, including the following:
    - 1.3.3.1 Formative
    - 1.3.3.2 Summative

2.0 Demonstrate knowledge in math, science, and related areas in general education of sufficient depth and breadth to support teaching of technological concepts identified in North Carolina technology education curriculum

- 2.1 Explain the relationship and transferability of technology education to other educational disciplines (communications, mathematics, science, and social sciences)
- 2.2 Demonstrate knowledge and skill in identifying and teaching concepts and principles from other educational disciplines essential to support the teaching/learning process with regard to the North Carolina technology education curriculum

3.0 Demonstrate appropriate academic studies for teaching the North Carolina technology education curriculum

3.1 Demonstrate knowledge about the development of technology, its effect on people, the environment, and culture; and industry, its organization, personnel systems, techniques, resources and products, and their socio-cultural impact and be able to:

  3.1.1 Identify and describe the evolutionary development of technology

  3.1.2 Describe the effects of technological development on the environment

  3.1.3 Describe the effects of technological development of socio-cultural systems

  3.1.4 Describe and explain and systems model that represents industry as a socio-economic organization

3.2 Demonstrate knowledge about content organizers as defined in the North Carolina technology education curriculum and be able to:

  3.2.1 Identify, describe, and demonstrate ways in which communication takes place in society to transfer information to extend human potential

  3.2.2 Identify, describe, and demonstrate ways in which resources are used to build structures or constructed works on site

  3.2.3 Identify, describe, and demonstrate ways in which resources are used to extract and convert raw materials into industrial consumer goods

  3.2.4 Identify, describe, and demonstrate ways in which resources are used to obtain time and to attain time and maintain direct physical contact and exchange among individuals and societal units through the movement of materials, goods, and people

3.3 Demonstrate knowledge and a level of skill in the use of tools, instruments, and machines sufficient to teach courses identified in the North Carolina technology education curriculum

3.4 Define, describe, and explain the application to technological concepts, processes and systems

3.5 Demonstrate knowledge and skill in the safe and efficient application of tools, materials, machines, processes, and technical concepts

3.6 Demonstrate skills, creative abilities, positive self-concepts, and individual potential in technology

3.7 Demonstrate knowledge and skill in problem-solving and decision-making abilities involving human and material resources, processes, and technological systems and be able to:

  3.7.1 Identify and explain several models for problem-solving

3.7.2 Demonstrate the use of a problem-solving model in a decision-making process

3.7.3 Design technological problem-solving activities appropriate for the classroom teaching/learning process in technology education

3.8 Demonstrate knowledge and skill in providing activity-oriented laboratory instruction to reinforce abstract concepts with concrete experiences and be able to:

3.8.1 Identify abstract technological concepts in courses in the North Carolina technology curriculum

3.8.2 Design and demonstrate activity-oriented laboratory experiences appropriate for teaching of abstract technological concepts

3.9 Demonstrate knowledge about emphasis of "know how" and "ability to do" in carrying out technological work and be able to:

3.9.1 Describe the relationship between human cognitive and psychomotor function in technological work

3.9.2 Demonstrate the presence of cognitive and psychomotor processes in technology learning activities

3.10 Identify students' attitudes, knowledge, and skills regarding the function of technological systems and be able to:

3.10.1 Explain a systems model and describe its individual components

3.10.2 Describe the application of systems model theory to technological systems

3.10.3 Describe the relationships of technological systems

3.11 Identify the application of attitudes, knowledge, and skill to understanding new or different past-present-future technology systems and be able to:

3.11.1 Use systems model theory to explain technological systems and systems applications in other disciplines

3.11.2 Design scenarios to utilize systems model theory in studying the evolution of a technological system (Research and Experimentation)

3.12 Apply knowledge of other areas of knowledge (i.e., mathematics, science, history) to technology and the solution of human and social problems, including appropriate skill in the use of tools and machines

4.0 Demonstrate knowledge and abilities to perform identified tasks in developing, managing, and evaluating a technology program in schools

4.1 Develop a strategic plan for the school-level technology education program and be able to:

4.1.1 Develop a rationale to support the mission statement

4.1.2 Identify action steps to identify course scope and sequence, implementation plans, and timelines for accomplishment

4.1.3 Identify a program review plan consistent with North Carolina technology education and with National Standards for Technology Education Programs

4.2 Identify content based on goals and objectives within content organizers identified in the North Carolina technology education curriculum

4.3 Design an educational environment in the classroom and laboratory with North Carolina standards to support the instructional process and be able to:

4.3.1 Identify class and areas required to support the following functions: large group instruction, small group and individual planning, research and design, fabrication, testing and evaluation, and documentation

4.3.2 Identify a variety of text and supportive printed materials to be provided within the classroom environment

4.3.3 Identify non-print materials to be provided within the classroom environment

4.3.4 Identify a variety of consumable materials to be provided within the classroom and laboratory environment

4.3.5 Identify appropriate equipment to support North Carolina standards within technology education

4.4 Design appropriate instructional strategies for individuals and group instruction, including safety instruction and be able to:

4.4.1 Develop instructional strategies for individual and group instruction

4.4.2 Identify techniques for modifying instructional strategies to accommodate needs of special populations including disadvantaged, handicapped, and gifted students

4.4.3 Identify safety focus in all instructional strategies

4.5 Develop a plan for laboratory management and be able to:

4.5.1 Describe student and teacher roles/responsibilities in laboratory management (i.e., safety, inventory, filing, requisitioning equipment and materials, maintenance, budgeting)

4.5.2 Identify, describe, and demonstrate a safety system in accordance with North Carolina Safety System design document

4.5.3 Identify, describe, and demonstrate a system for inventory of materials and laboratory equipment

4.5.4 Identify and describe a filing system

4.5.5 Describe a maintenance plan, including yearly processes for preventive maintenance and non-operating equipment

4.5.6 Demonstrate ability to develop a yearly budget for laboratory operations

4.6 Develop lesson plans, organize materials, and present psychomotor, affective, and cognitive instruction and be able to:

4.6.1 Identify components of a lesson plan and demonstrate ability to develop

4.6.2 Organize materials and demonstrate ability to provide instruction in psychomotor, affective, and cognitive areas

4.7 Demonstrate knowledge about establishing student expectations and developing/implementing a behavior policy and be able to:

4.7.1 Identify expected standards of student conduct in accordance with school policy and social expectations for appropriate learning environments

4.7.2 Develop and describe implementation of a behavior policy for the technology education classroom and laboratory

4.8 Demonstrate knowledge about establishing a student organization within the technology education program and be able to:

4.8.1 Identify and describe process for establishing a chapter of TSA (Technology Student Association) as an integral part of the technology education instructional program

4.8.2 Describe teacher/student roles in managing and evaluating TSA chapters

4.8.3 Demonstrate the use of TSA competitive events as instructional tools to reinforce classroom instruction

4.9 Demonstrate knowledge for promoting and articulating technology education to internal and external publics and be able to:

4.9.1 Identify purposes for marketing the technology education program to various groups including students, school administration, parents, and community

    - 4.9.2 Demonstrate ability to develop verbal, written, and media promotional materials
    - 4.9.3 Develop an annual marketing plan
  - 4.10 Demonstrate knowledge for developing and coordinating an external advisory committee for the technology education program and be able to:
    - 4.10.1 Identify purposes of an advisory committee
    - 4.10.2 Develop a plan for establishing and coordinating an advisory committee
  - 4.11 Demonstrate knowledge for establishing a professional development plan for continued personal and professional growth and be able to:
    - 4.11.1 Develop a rationale for "lifelong" learning with regard to personal and professional life
    - 4.11.2 Develop an individual strategic plan that includes personal and professional long-range goals, objectives, action steps, and evaluation strategies
  - 4.12 Demonstrate knowledge for identifying and using standards for program improvements and be able to:
    - 4.12.1 Identify a process for using the national Standards For Technology Education Programs to evaluate technology education programs
    - 4.12.2 Describe the process for using the findings to develop program improvement plans
- 5.0 Demonstrate knowledge about attitudes, knowledge, and skills necessary for success as a teacher in technology education
  - 5.1 Demonstrate ability to use specialized instruction in classroom and laboratory settings for the study of technology education
  - 5.2 Demonstrate ability to manage technological activities on individual and group bases and be able to:
    - 5.2.1 Describe and plan a system for managing instructional support systems including resources
    - 5.2.2 Describe, plan, and demonstrate an instructional management system
  - 5.3 Demonstrate skill in providing instruction with regard to multicultural and global perspectives as they relate to the study of technology
  - 5.4 Demonstrate skill in providing instruction with regard to values and ethics as they relate to content issues in the study of technology

6.0 Demonstrate ability to teach technology education through a full-time teaching experience conducted in a technology education laboratory under the supervision of a college/university technology education facility and a master teacher in technology education

 6.1 Identify, describe, and participate in a wide range of professional experiences which accompany the teaching of technology education, including the following:

  6.1.1 School and community-based educational functions, including faculty meetings, PTO meetings, school committee meetings, school board meetings, etc.

  6.1.2 North Carolina-Technology Students Association

  6.1.3 Technology education professional organizations including NC-TEA and ITEA

  6.1.4 Technology education in-service activities including regional and state workshops

 6.2 Demonstrate ability in classroom leadership by assuming the responsibility for preparing, teaching, and managing classes in technology education

GUIDELINES FOR TEACHER EDUCATION COMPETENCIES
IN
TECHNOLOGY EDUCATION GRADUATE PROGRAMS

Advanced degree programs in technology education are offered at the master's and doctoral levels of study. Such programs are intended to develop increased levels of teacher competence as identified in undergraduate teacher education competencies. Research, including statistical application, will provide a basis for gathering, analyzing, and making recommendations with regard to change in the teaching/learning process. Finally, leadership and management skills will provide competence for personal classroom management or for program supervision/administration.

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MARKETING EDUCATION

A. Purpose and Nature of Marketing Education in the Secondary School Curriculum

The purpose of the marketing education instructional program in the secondary schools is to prepare students for employment, advancement in marketing and management careers, and/or future studies in two-year technical/community colleges or four-year colleges or universities. The instructional program at the high school level includes subject matter and learning experiences related to the performance of activities that direct the flow of goods and services from the producer to the consumer.

Emphasis is on the development of attitudes, skills, and knowledges needed for successful employment in marketing, management, and business ownership. Students develop competence in marketing functions and foundations: economic foundations, marketing and business foundations, human resource foundations, distribution, financing, marketing-information management, pricing, product/service planning, promotion, purchasing, risk management, and selling.

Special emphasis is placed on the use of cooperative (on-the-job training) method and other methods which stress application to and direct involvement with marketing businesses. Marketing programs in the secondary schools are designed to enable students to:

1. make realistic career choices regarding marketing careers;
2. develop an understanding and appreciation of the social and economic values of the production, marketing, and consumption of goods and services;
3. increase their marketing occupational efficiency through a variety of learning modalities: classroom instruction, individual projects, on-the-job training, laboratory experiences, internships, and activities of the marketing student organization;
4. develop initiative and leadership skills;
5. prepare for their occupational objectives in marketing;
6. prepare for further education in the discipline of marketing; and
7. develop and apply communication, computational, problem-solving, critical thinking, and planning competencies which will enable them to pursue further education and/or advance more rapidly in their chosen marketing career.

B. Guidelines for the Preparation of Marketing Teachers

Programs of undergraduate study in marketing education are designed to prepare graduates as marketing teachers. Preparation of marketing teachers should include the broad general education required of all teachers. In addition, a minimum of 40% of the undergraduate program should be devoted to the development of generic and specialized professional and technical competencies basic to marketing education.

GUIDELINE 1: The program should provide preparation in the areas of the professional marketing education concentration competencies in sufficient depth to develop competence in the required professional marketing education areas.

Preparation under this guideline should provide concentrated study in the professional competency areas unique to marketing education: administration and program management, coordination techniques, methodology, career development in marketing, student organization activities, use of community resources and advisory committees, management of individual learning activities, evaluation, and handling of fiscal matters.

The beginning marketing teacher must be able to:

a. Demonstrate effective methods, specialized techniques, instructional procedures, and educational media in the presentation of marketing subjects;

b. Evaluate textbooks, equipment, and materials to be used in marketing courses;

c. Design a marketing curriculum;

d. Explain the philosophy and major issues in marketing education;

e. Plan, organize, and administer a marketing program in the secondary school;

f. Implement coordination techniques for the marketing program;

g. Identify the purposes of and effectively work with a marketing advisory committee;

h. Manage the marketing student organization chapter;

i. Incorporate career guidance into the marketing program;

j. Demonstrate a basic understanding of computer hardware and software appropriate for the marketing program; and

k. Develop a marketing plan for the marketing program in the secondary school.

GUIDELINE 2: The program should provide preparation in the subject matter concentration in sufficient depth to develop competence in the required technical marketing areas.

Preparation under this guideline should provide sufficient concentrated study to assure competence in all of the following areas:

a. Economic Foundations
b. Human Resource Foundations
c. Marketing and Business Foundations
d. Distribution
e. Financing
f. Marketing-Information Management
g. Pricing
h. Product/Service Planning
i. Promotion
j. Purchasing
k. Risk Management
l. Selling

GUIDELINE 3: The undergraduate program should require appropriate marketing occupational experience to enable the prospective teacher to demonstrate competence in a marketing occupation.

Preparation under this guideline should ensure that the marketing experience(s) have been of sufficient depth to enable the undergraduate to demonstrate evidence of competency in at least one of the marketing functions. A formal approval process is to be developed by each university. The approval process includes an arrangement by which the candidate will be required to satisfactorily demonstrate or document competence. The approval process to meet this guidelines should be administered by a member of the marketing education faculty of the university.

The occupational experience approval process at the university should ensure that occupational experiences are:

- Relevant: Primary job duties includes use of marketing principles/practices.
- Current: A majority of the work experience has been completed within the five years preceding work experience approval.
- Comprehensive: Work experience(s) will allow the prospective marketing teacher to assist students in the transition from school to employment.

C. Technical Competencies Needed by Marketing Teachers

In order to carry out the objectives of the secondary school marketing education curriculum, the teacher must be able to display competence in the following technical marketing areas:

1. Economic Foundations
    - 1.1 basic concepts of economics
    - 1.2 economic systems
    - 1.3 cost/profit relationships
    - 1.4 international marketing concepts
    - 1.5 economic trends/indicators

2. Human Resource Foundations
    - 2.1 self understanding
    - 2.2 interpersonal skills
    - 2.3 career development

3. Marketing and Business Foundations
    - 3.1 functions of business
    - 3.2 marketing functions and concepts
    - 3.3 management functions
    - 3.4 business operations

4. Distribution
    - 4.1 components of the distribution decision
    - 4.2 nature of channels and channel members
    - 4.3 wholesale, retail, and specialist business activities and functions
    - 4.4 inventory management and control

5. Financing
    5.1 budgeting for financial needs
    5.2 obtaining business credit
    5.3 extending credit to consumers and other organizations

6. Marketing-Information Management
    6.1 need for and uses of a marketing information system
    6.2 use of the scientific method of problem-solving
    6.3 using appropriate marketing information technology

7. Pricing
    7.1 pricing objectives, strategies, techniques
    7.2 determining selling prices

8. Product/Service Planning
    8.1 market opportunity analysis
    8.2 components of the product/service mix
    8.3 product/service performance evaluation

9. Promotion
    9.1 the communications process
    9.2 the promotional mix
    9.3 public relations

10. Purchasing
    10.1 determining purchase needs
    10.2 identifying sources
    10.3 purchasing activities

11. Risk Management
    11.1 controllable and uncontrollable factors
    11.2 insurable and non-insurable risks
    11.3 security and safety considerations

12. Selling
    12.1 understanding customers/clients
    12.2 processes and techniques of selling
    12.3 time and activity planning
    12.4 knowledge of products and services

D. Guidelines for Graduate Study for the Marketing Teacher

Graduate studies centered on an identified marketing teacher education program at an approved higher education institution must be based on the previous sections cited for the "A" certificate in marketing education (Parts A, B, and C) and include the following guidelines:

GUIDELINE 1: The program of study for each graduate student is jointly planned by the student and a member of the university's marketing teacher education faculty.

Joint planning results in an individualized program of study reflecting the unique needs and goals of the marketing teacher.

GUIDELINE 2: The graduate program in marketing teacher education will develop competencies not included in the undergraduate preparation as well as develop advanced levels of competence in technical marketing areas and professional marketing education areas.

All graduate programs at the master's degree level for teachers of marketing subjects should address the development and further enhancement of a common core of areas of study. The components that will typically be a part of a program of study are as follows:

a. Research in marketing education;

b. Curriculum development in marketing;

c. Evaluation of students and the marketing program;

d. Technical marketing and management subjects;

e. Philosophy, Trends, and Issues in Marketing.

GUIDELINE 3: The advanced graduate degrees (sixth-year and doctoral degrees) should be planned according to the individual's goals but should also reflect the base concerns of research, curriculum, evaluation, technical subject matter, and teaching strategies.

Revised 6/90

TRADE AND INDUSTRIAL EDUCATION

A. Purpose and Objectives of the Program as Incorporated in the School Curriculum

The primary purpose of Trade and Industrial Education as a part of secondary education is to provide instruction in the field of trades and industries for all youth who are interested and can benefit from such education. The instructional program should prepare students for employment in trade or industrial occupations by developing such competencies and knowledge as are necessary and desirable. The program should permit maximum flexibility for students to meet the needs of those preparing for immediate employment and/or those who wish to continue in post high school occupational education programs.

Trade and Industrial Education is a balanced program of studies including laboratory and/or outside work experiences that have the common objective of producing competent workers. This program develops the skills, abilities, attitudes, and habits needed for employment, and imparts knowledge or information needed by individuals who desire to enter and make progress in an occupation. The goal is an American citizen who, as a worker, is competent economically, socially, emotionally, and physically.

The mission of Trade and Industrial education is:

- The development of PEOPLE -- not products
- People who can be productive as contributing members of society
- People with adaptability to the dynamics of the era
- People whose occupational interest or employment is in trade, service, or technical pursuits - from the lowest to the highest positions
- People who share the benefits and the responsibilities of a democratic society with all other people

Trade and Industrial Education includes two general types of programs, - "Introductory" and "Skill Development". The Introductory programs consist of Introduction to Trade and Industrial Education courses and Introductory Courses for specialized subject areas, e.g., Carpentry, etc. The Skill Development Program would include Industrial Cooperative Training and Trade Preparatory Training Courses.

B. Guidelines for the Preparation of Trade and Industrial Teachers

The program for preparation of the several categories of instructors for Trade and Industrial Education should be a closely integrated system of courses and experiences, with approximately 30 percent of the undergraduate curriculum devoted to instruction in accordance with the following guidelines:

GUIDELINE 1: The curriculum should recognize the acquisition of subject matter competency through appropriate work experience.

The diversity of occupations in Trade and Industrial Education is unique to any other discipline. It is highly unlikely that any one institution can readily provide content area subject matter preparation in all areas. Therefore, institutions of higher education should recognize the experience through successful completion of an occupational competency examination.

GUIDELINE 2: Professional competencies should be developed through a program of studies devoted to the history, philosophy, and contemporary practices of Trade and Industrial Education.

The study should develop a working knowledge of the current Trade and Industrial Education philosophies. Opportunities should be provided for students to acquire:

- an understanding of the State Plan for Vocational Education including State and local laws pertaining to labor and vocational education
- an understanding of the history of vocational education and its relationship to other elements in the educational system
- an understanding of the roles of an instructor as a professional educator, their responsibilities to the profession, to themselves, to the students, and to society
- an understanding of the role of the teacher in vocational guidance and career planning

GUIDELINE 3: The program should orient the prospective Trade and Industrial Education teachers to job classifications and competency requirements appropriate to related jobs within their trade and industrial programs.

Opportunities should be provided for the prospective teacher to acquire knowledge of jobs and the specific tasks involved in the areas of Trade and Industrial Education including laboratory experiences, practicum, and cooperative experiences to obtain skills.

GUIDELINE 4: The program for preparation of prospective coordinators of Industrial Cooperative Training should assure experiences in at least three of the programs in Trade and Industrial areas.

Prospective coordinators should have a wide variety of occupational experiences in industrial fields prior to enrollment in the program. When such experiences are insufficient, the teacher education institution should arrange for and supervise experiences in appropriate industrial jobs.

GUIDELINE 5: A broad offering of studies in the behavioral sciences should provide for the understanding of students in public school Trade and Industrial Education programs, with particular reference to their individual growth and development and their response to learning environments and activities.

The behavioral sciences provide for understanding of human behavior in a technological environment. Principles of behavior should be studied through application of psychology, sociology, and other behavioral sciences to shop/laboratory situations and to industry. Practice in analysis and control of sociological situations should help develop ability to work effectively with students, supervisors, department heads, administrators, advisory committees, and personnel in industry.

GUIDELINE 6: Studies should provide for the development of competencies necessary to analyze the needs for a Trade and Industrial Education program; to plan and implement a program in keeping with the needs, and to devise and use effective means to evaluate program results.

Planning and organizing programs of vocational instruction are considered to be major competencies of the instructor. Preparation should include adequate opportunity to acquire skills and specific competencies such as: conducting occupational analyses; providing for development of manipulative skills, technical knowledge, and communicative skills; selecting and arranging sequential teaching-learning activities into appropriate units; selecting pertinent texts and reference materials to meet the relevant objectives identified with the students; planning, preparing, administering, and evaluating appropriate tests to measure the vocational skills and knowledge acquired by students; and preparing complementary individualized instructional materials.

GUIDELINE 7: The program of studies should develop competencies and skills in educational methodology, including lesson planning, teaching methods and techniques, testing and evaluation, and media development and usage.

The preparation of instructors should emphasize the characteristics of vocational teaching, and should enable the instructor to become competent in those skills and knowledges which are unique to the field of Trade and Industrial Education in addition to those common to all education. Throughout the program of study the prospective teacher should have ample opportunities to use audio and visual media, to prepare models, mock-ups, transparencies, and other teaching-learning materials. The program of study should enable the prospective instructor to become competent in such activities as the use of tests and measurements, the effective use of instructional materials, and techniques in counseling students.

C. Competencies Needed by Teachers to Achieve Program Objectives

Subject Matter Competencies

Teacher education at the University level in Trade and Industrial Education recognizes prospective teachers possessing occupational competency in a trade or industrial occupation. The competency level of teachers is verified through actual work experiences and/or successful completion of a validated occupational competency examination in a trade or industry occupation either prior to entering a teaching position or during the first year. The degree of occupational competency needed by teachers in Trade and Industrial areas depends on the type of program and course in which the instructor will teach. Additional work experience through cooperative internships and/or content courses will be offered through the teacher education program and other agencies to overcome any occupational deficiencies based on individual needs.

Teachers of Introductory courses must have industrial occupational work experience in one or more areas. Teachers of Skill Development courses are specialized and must be highly competent in a specialized area or areas.

1.0 The teacher in introductory programs and courses should be able to:

1.1 Analyze trade and industrial occupations using the concept of Trade Analysis or Job Analysis

1.2 Identify and analyze at least fifteen (15) different trades and industrial occupations within your trade

1.3 Identify and analyze at least five (5) entry-level jobs in the trade and industrial area of your desired certification

1.4 List the technical knowledge, physical skills, safety, and other attitudes required or needed for each entry level job in your trades and industrial programs

1.5 Identify and describe equipment, tools, and materials needed in those trade and industrial occupations analyzed in 1.1 and 1.2

1.6 Demonstrate the knowledge of safety practices used in handling equipment, tools, and materials

1.7 Demonstrate the ability to organize or plan a shop or laboratory for an orderly work flow process

1.8 Develop a plan for repair, maintenance, and inventory of shop, equipment, tools, etc.

1.9 Demonstrate ability to organize a variety of group activities during an instructional program

1.10 Demonstrate the ability to plan an instructional program (lesson plan) identifying instructional materials, teaching techniques, learning activities, evaluation methods, equipment, tools, materials, etc., to be used

1.11 List job trends in at least five (5) of the trade or industrial occupations analyzed in 1.1 and 1.2

1.12 List the major jobs in progression of difficulty in at least five (5) of the trade and industrial occupations analyzed in 1.1 and 1.2

1.13 Identify at least five (5) sources of information that may be used to analyze and obtain other essential information.

1.14 Identify the process and procedures used to organize and implement a student organization

1.15 Demonstrate the ability necessary to plan and organize a student organization activity or meeting

1.16 Demonstrate the ability to evaluate student progress and programs

2.0 The teacher in skill development training programs and courses should be able to perform all competencies identified in the above, related to their trade area and including:

2.1 Demonstrate occupational competency in the trade or industrial occupation in which the teacher is seeking certification

2.2 Occupational competency must be verified through validated work experience or cooperative internship work experience and/or a validated occupational competency examination

2.3 Demonstrate the ability to plan and layout a job or activity to be performed by identifying the cost, time, equipment, tools, materials, labor, etc.

2.4 Develop an instructional plan whereby three (3) or more groups of students are performing varied activities at the same time relative to a given subject area

3.0 Professional Competencies

3.1 Employ teacher-centered methods of presentation to demonstrate manipulative skill, present a concept or principle through demonstration, give an illustrated talk, and provide mediated instruction

3.2 Utilize the philosophy and instructional strategies of the occupational strategies of the occupational education profession

3.3 Provide appropriate guidance for student-learners in trade and industrial programs

3.4 Provide safety instruction for students in classroom and laboratory

3.5 Maintain safety in classroom and laboratory

3.6 Evaluate trade and industrial education students and programs

3.7 Select appropriate training stations for students in skill development programs

3.8 Develop training plans and agreements for Industrial Cooperative Training students

3.9 Organize and maintain an active craft or advisory committee for your trade area

3.10 Conduct a community survey for your trade area

3.11 Organize, develop, and direct student organization activities - VICA

3.12 Identify and explain the trade and/or professional organizations appropriate to trade and industrial education

3.13 Demonstrate ability to understand and utilize curriculum materials developed by the State for instructional purposes

3.14 Describe how trade and industrial education is organized at the State, regional and local level

3.15 Demonstrate ability to modify a subject being taught to individualized levels of students in one class

3.16 Demonstrate ability to modify a subject being taught for disadvantaged and handicapped students

3.17 Develop a plan for promoting sex equity in a subject area

3.18 Identify trade associations and industries that could be a resource for the subject being taught

3.19 Demonstrate ability to maintain competency records, progress charts, etc., for all students to ensure total coverage of the core competencies

GUIDELINES FOR ADVANCED VOCATIONAL EDUCATION PREPARATION PROGRAMS

The program for each candidate should be planned as a logically-organized whole, in continuation of the previous study and in relation to performance on screening procedures. A minimum of 60 percent of the graduate work should be in the discipline of the teacher's subject or academic field, and a minimum of 20 percent should be free for additional work in the subject field, in professional education, or for any graduate work that would add to the general competency of the individual.

For teachers prepared to teach in two subject fields at the undergraduate level and desiring to continue certification in both fields at the graduate level, the concentration must include each area, with the work about equally divided. In this situation, the concentration would constitute approximately 80 percent of the program, instead of 60 percent, with the remainder of the program devoted to professional study.

The master's degree program should provide preparation called for by each guideline, and the sixth-year and doctoral programs should be designed to develop breadth and depth in the same areas. The study should be planned so that programs meet the following guidelines:

GUIDELINE 1: The program should provide for concentrated study in the teacher's subject field or fields.

Study in the subject field should be characterized by flexibility and differentiation in recognition of individual needs and differences in backgrounds of education and experience.

GUIDELINE 2: The program should extend the teacher's understanding of the basic humanistic and behavioral studies relating to teaching and learning.

Study under this guideline should be a logical extension of undergraduate study dealing with the nature and purposes of education; the school curriculum; the problems and issues relating to education in their historical and philosophical aspects; and the concepts and principles within the behavioral sciences that have implications for education.

GUIDELINE 3: The program should broaden and deepen the understanding of teaching and learning theory through advanced study accompanied by appropriate clinical experiences.

Preparation under this guideline should include advanced study in the body of knowledge dealing with teaching and learning theory. The study and clinical experiences should enable the teacher to understand the theoretical principles that explain accepted professional practices and extend the ability to make practical applications.

GUIDELINE 4: The program should assist the teacher in gaining greater insights and skills in the use of the techniques of research and in designing and carrying out research projects.

Emphasis in this area should be on the study of research methods and findings, and on giving the teacher the necessary understanding and skills to develop action research in classroom situations and to extend the ability to utilize information from research reports in improving learning situations.

Completion of Program

The fifth-year program should normally lead to the master's degree. When a sixth year or beyond is involved, the institution should grant appropriate recognition for completion of the program.

Recommendation of Institution

Each candidate for a certificate must be recommended by the appropriate college officials. The recommendation must certify the completion of a master's degree level, sixth-year level, or doctoral-level program and must be accompanied by supporting transcript(s) or credit(s).

NOTE: These general guidelines will be applied to all advanced programs that have not developed specific guidelines.

Special Service Personnel (K-12)

MEDIA AND TECHNOLOGY PERSONNEL

Introduction

The certification guidelines are intended to assure that new persons entering the media and technology profession are well qualified to meet the complex challenges inherent in providing a good program of media and technology in the schools of the State.

The guidelines should offer encouragement and provide direction to currently certified professionals for continuing education and advancement. However, a new certificate is not required to continue holding a position which a person now holds on the basis of an existing certificate or combination of certificates. Present certifications as Associate Media Coordinator (075) and Media Specialist (077) will remain valid and in force as long as the persons holding those certificates remain in the profession.

Persons entering the profession after July 1, 1984, who have none of the existing certificates must obtain one of the certifications.

(1) MEDIA COORDINATOR (076)

The media coordinator certification is appropriate for persons having advanced preparation (graduate degree) in the broad area of media and technology. In addition to providing a basic library/media/computer skills program for students, the media coordinator is responsible for establishing and implementing a full media services program at the building level, including the supervision of media support personnel.

(2) MEDIA SUPERVISOR (078)

The Media Supervisor certification is appropriate for those persons who are responsible for directing the complete range of media services at the system level, including the supervision of all professional and support staff. Candidates for this certification must possess or be eligible to hold the Media Coordinator (076) certificate; must have at least three years of successful experience as a media coordinator; and must possess a master's degree from an approved media program plus twelve (12) graduate semester credits in administration, curriculum development, and/or supervision courses from an approved educational program.

(3) INSTRUCTIONAL TECHNOLOGY SPECIALIST–TELECOMMUNICATIONS (074)

The Instructional Technology Specialist--Telecommunications certification is appropriate for those persons who, through advanced study and preparation (graduate degree), have developed extensive knowledge and skill and can provide specialized services in certain technical areas of media services, particularly in the design, development, and production of instructional materials in the various formats (audio, video, electronic); in the selection, organization, and operation of various types of telecommunication equipment; in the programming, production, and utilization of televised media (cable, open-air broadcast, satellite); and in the application of communications technology to the teaching and learning process.

(4) INSTRUCTIONAL TECHNOLOGY SPECIALIST–COMPUTERS (077)

The Instructional Technology Specialist--Computers certification is appropriate for those persons who, through advanced study and preparation (graduate degree), have developed extensive knowledge and skill in the area of computer technology (hardware, courseware, programming techniques, interactive systems) and its application to the K-12 curriculum. The role of the computer specialist may vary from one of an educational leader who coordinates the overall computer technology program in a school system to one who concentrates in a specific content area or a specific process.

MEDIA COORDINATOR

A. Role of Media Coordinator

The school media coordinator has the primary responsibility for leadership and implementation of a school library/media program that is an integral part of the instructional process. To accomplish this, the media coordinator:

- Develops plans to ensure effective instruction and management of the media program
- Is an effective teacher
- Provides a variety of services that extend and reinforce the instructional program of the school
- Promotes positive relationships with students, staff, and community
- Effectively coordinates the evaluation and selection of instructional resources
- Is an effective manager
- Displays evidence of professional ethics, growth, and development

Personal effectiveness skills, combined with professional knowledge and expertise, are necessary for successful interaction with students, teachers, administrators, and other patrons.

Preparation programs for the media coordinator develop those competencies deemed essential for the beginning media coordinator. This stage is the primary responsibility of the preparing university, working cooperatively with school systems in which field experiences are provided. It culminates in eligibility for 076 (media coordinator) certificate and possession of a master's degree from an approved program.

B. Program Guidelines for the Preparation of Media Coordinator

The program of preparation of the media coordinator should have a planned sequence, but with sufficient flexibility to allow for differences in the educational background and experiences of the candidates. This master's degree program should provide competencies required by the guidelines.

Emphasis must be placed upon experiential learning through simulation, case studies, field studies, internships, and other instructional activities that require the individual to interact with a "real" teaching-learning environment.

GUIDELINE 1: The program should provide for the development of a comprehensive, integrated understanding of the role of media in relation to teaching and learning.

Emphasis should be placed on the acquisition of knowledge concerning the contribution of different media in promoting effective learning by students who vary widely in interests, capabilities, and needs; the development of skills that enable the media coordinator to exercise a leadership role in the application of media resources and media skills to the accomplishment of specific learning objectives; and the media coordinator's role as teacher.

GUIDELINE 2: The program should develop appropriate attitudes and skills in human relations.

The program of study and practicum experience should develop human relations skills in providing leadership for the media program, including group processes and their specific application to work with instructional and support personnel.

GUIDELINE 3: The program of study and practicum experiences should provide for the acquisition of knowledge and the development of skills in the evaluation and selection of media.

The program should provide competence in the evaluation and selection of materials in terms of their (1) purported function in promoting learning; (2) appropriateness to learner needs; and (3) compatibility with instructional objectives. The program should also provide knowledge and competence related to the establishment and coordination of a media selection policy.

GUIDELINE 4: The program should provide study and experience that provide competence in developing effective utilization of media by students and teachers.

Emphasis should be placed on the development of skills related to assisting students and teachers in the effective use of media; in creating and maintaining a favorable environment for learning; in providing leadership in the incorporation of new and innovative uses of media in the instructional program; and planning and providing leadership in activities related to professional staff development.

GUIDELINE 5: The program should provide for the development of skills in the production of instructional materials.

Study and laboratory experience should develop competencies essential to the design and production of instructional materials which can make a significant contribution to learning. The motivation and increased learning resulting from the involvement of students and teachers in such activities should be stressed.

GUIDELINE 6: The program, through study and experience, should provide competencies related to the organization and management of the media collection.

The program should provide the competencies to apply and adapt principles and practices of classifying, cataloging, and indexing; to evaluate systems and aids from outside sources for cataloging resources; to display the collection in an attractive, stimulating, and convenient manner; and to establish effective systems-related inventory, preventive maintenance, and provision of production and processing supplies.

GUIDELINE 7: The program should provide for the acquisition of knowledge and development of skills related to the planning and management of the media program.

The program should provide the ability (1) to practice effective supervisory techniques and personnel relationships; (2) to formulate long-range plans of immediate and future steps related to the development of the media program; (3) to write educational specifications for the design and construction of media facilities for the school and/or the system; (4) to assist in the preparation and interpretation of the media budget; and (5) to actively participate in the design and implementation of evaluation procedures to determine the effectiveness of the media program in the learning activities of the school or system.

C. Competencies Needed by Media Coordinators

The school's media coordinator has primary responsibility for leadership and implementation of an effective school library/media program at the building level. The media coordinator should be able to demonstrate substantial knowledge and proficiency in content areas considered to be basic in the preparation of media coordinators (K-12). Competencies required in each of these areas are described below.

1.0 Administration

The ability to develop and implement media programs which facilitate the achievement of the educational goals, including the management of media and human resources. The candidate will be able to:

1.1 Develop annual and long-range goals for a comprehensive school media program

1.2 Prepare, justify, and administer the media program budget based on curricular needs

1.3 Participate in planning, arranging, and utilizing media facilities to support the instructional program

1.4 Formulate schedules to accommodate the needs of students and teachers in small/large groups and/or individually

1.5 Train, supervise, and evaluate clerical/technical personnel, volunteers, and student assistants in relation to the effective use of their time and talents.

1.6 Initiate the formal and informal agreements providing for increased availability of media through resource sharing

1.7 Implement the use of the automated systems for instruction and/or bibliographic control

1.8 Evaluate the effect of the overall media program on teaching/learning

1.9 Apply the principles of research to the development and implementation of the media program

1.10 Assess new technology for possible educational applications

2.0 Communication and Leadership

The ability to initiate interaction with students, staff, administration, and or the general public for purposes of interpreting, promoting, and expanding the media program. The candidate will be able to:

2.1 Interpret the school media program to administrators, school board, and lay public

2.2 Provide for regular communication between media center personnel and users

2.3 Plan and conduct staff development activities to develop media competencies of instructional staff

2.4 Apply appropriate interaction skills for relating to students and teachers

2.5 Plan and implement strategies for positive public relations

2.6 Ensure professional growth by participating in continuing education programs

2.7 Identify the function of local, State, and national professional organizations

3.0 Evaluation and Selection

The ability to apply basic principles of evaluating and selecting media to support the instructional program. The candidate will be able to:

3.1 Recognize the school's organizational pattern, the curriculum, and the instructional objectives affecting the selection of media

3.2 Develop and implement an individual school selection policy compatible with system-wide policy

3.3 Organize and provide leadership for the school's Media Advisory Committee, involving administrators, teachers, students, and the lay public

3.4 Identify and/or develop criteria appropriate for evaluating various forms of media in all subject areas and grade levels

3.5 Assess the media collection, identify strengths and weaknesses, and coordinate the selection of appropriate media to ensure a comprehensive, balanced collection

3.6 Identify and work cooperatively with reputable publishers, producers, and dealers marketing educational media to ensure satisfactory purchases

3.7 Ensure that the evaluation and selection process provides curriculum-related media appropriate to the varying abilities, interests, attitudes, and needs of users

3.8 Recognize the characteristics unique to each media format and select items according to their specific contribution to learning

3.9 Provide for hands-on evaluation of media and/or identify reliable bibliographic tools to aid in selecting media

3.10 Identify and arrange for use of community resources compatible with curricular needs

3.11 Maintain an up-to-date media collection by periodically screening out obsolete items

3.12 Respond to censorship attempts by using the Citizen's Request for Reconsideration of Media, the School's Selection Policy, and the Media Advisory Committee

4.0 Organization and Management

The ability to establish and carry out procedures for effective and efficient acquisition, cataloging, processing, accessing, and maintaining equipment and materials. (AASL, p. 11) The candidate will be able to:

4.1 Coordinate the acquisition process for materials, equipment, and media supplies

4.2 Establish policies and implement procedures for classifying, cataloging, and processing all school-owned media, information files, and community resources

4.3 Organize and maintain a current catalog and shelf list for all school-owned media

4.4 Select and/or design appropriate media circulation systems

4.5 Establish, implement, and evaluate circulation policies based on needs of users

4.6 Ensure accessibility to all types of materials and accompanying equipment through appropriate housing

4.7 Plan and manage effective procedures for equipment maintenance

4.8 Implement procedures for ongoing inventory of materials and equipment

5.0 Instruction and Utilization

The ability to instruct students and faculty in using and/or producing media to facilitate the teaching/learning process. The candidate will be able to:

5.1 Teach media skills within the framework of the school's curriculum as outlined in State curriculum guides

5.2 Participate in the curriculum development process to establish learning objectives and recommend appropriate media to accomplish these objectives

5.3 Plan, conduct, and evaluate a literary appreciation program which includes guidance in reading, listening, and viewing experiences

5.4 Provide specific information and resources in response to reference requests

5.5 Assist teachers and students in identifying, obtaining, and producing media based on abilities, interests, curricular needs, and learning styles

5.6 Instruct and supervise students and teachers in instructional design, media production, and equipment operation

5.7 Use the basic principles of instructional design to produce media for specific learning objectives

5.8 Evaluate effectiveness of media production based upon stated objectives

5.9 Assist students in identifying concepts presented in media and with interpreting and organizing information

MEDIA SUPERVISOR

A. Role of Media Supervisor

The media supervisor is defined as one whose primary concern is the improvement of learning opportunities through leadership in the implementation and administration of a strong unified library/media program. The media supervisor has the role of decision maker, consultant, and specialist in advising administrators, teachers, and other professional personnel. Responsibilities include curriculum development, instruction, resource collection development, and staff development.

The media supervisor may be identified by a variety of titles such as Media Director, Coordinator of Library/Media Services, and Library Supervisor. The media supervisor serves as a member of a management team charged with the responsibility for planning, implementing, and evaluating an educational program relevant to the needs of the student population in a school system. In theory and practice, the functions of the supervisor and the administrator share many commonalities. Differences occur in the degree to which a competency area is practiced, and the scope of decision making and authority associated with the two roles.

Preparation programs for the media supervisor develop those competencies deemed essential for the beginner in a supervisory role. This stage is the primary responsibility of the preparing institution, working cooperatively with school systems in which field experiences are provided. It culminates in at least twelve (12) graduate semester credits in administration, curriculum development, and supervision courses from an approved educational program beyond possession of or eligibility for Media Coordinator (076) certificate; at least three years of successful experience as a media coordinator; and possession of a master's degree from an approved media program.

B. Program Guidelines for the Preparation of Media Supervisors

The program of preparation should be characterized by flexibility, individualization, and personalization to allow for differences in the capability, experiences, and educational background of candidates. Programs of study for all students will contain common elements; however, the mix of these elements will vary for individual programs of study. It is assumed that candidates admitted to the program will have exhibited a reasonable leadership potential in their work with students, professional associates, and the general public.

Educational programs designed to develop the competencies identified will place as much emphasis upon educative process as upon educative content, for the process of supervision is as much a reflection of affective understanding as it is of cognitive learning. Emphasis, then, must be placed upon experiential learning through simulation, case studies, field studies, internships and other instructional activities which require the individual to interact with a "real" teaching-learning environment. The twelve (12) semester hour programs should be planned in accordance with the guidelines below:

GUIDELINE 1: The program should provide advanced level preparation in the areas of administration, supervision, and curriculum development through completion of a minimum of twelve (12) graduate semester hours.

Preparation in these areas should be beyond expectations defined in the master's level Media Coordinator (076) preparation program since candidates must possess or be eligible to hold the graduate-level Media Coordinator (076) certificate. There should be supporting evidence from the field that would attest to traits and behaviors related to potential success of the candidate as media supervisor since at least three years of successful experience as a media coordinator is a prerequisite. After the candidate has been regularly admitted to the program and passes from one phase of preparation to another, faculty advisors should make periodic evaluations of progress and take specific action designed either to encourage continuation or a reformulation of career goals. In addition, program exit evaluation processes and procedures should be developed to determine student proficiency in relation to the competencies identified, and to assess program effectiveness.

GUIDELINE 2: The program should provide advanced level study in the humanistic and behavioral components of preparation.

Study under this guideline should reflect upper level consideration of the problems of education from a philosophical, historical, behavioral, and social sciences point of view. Preparation in this area demands a reasonable command of the principles and concepts in the areas of political science, economics, sociology, anthropology, and social psychology that relate directly to education supervision. The program should be implemented through a carefully designed, comprehensive, interdisciplinary approach. Emphasis should be placed upon the application of the principles and concepts learned in planning educational programs and in solving educational problems.

GUIDELINE 3: The program should provide comprehensive study of the dynamics of human behavior.

Preparation in this area should include a careful study in the variety of ways in which people work together successfully and an analysis of both individual and group behavior procedures for helping people in their personal adjustments and interpersonal relations. The program should provide (1) knowledge of and considerable practice in group processes and their specific applicability to the work of the supervisor; (2) experiences designed to foster the candidate's appreciation of individuality and sensitivity to the feelings of others; (3) opportunities for trying out and evaluating the candidate's leadership skills; and (4) opportunities for demonstrating creativity and initiative in activities of the supervisor.

GUIDELINE 4: The program should develop advanced level understanding of teaching-learning theory, including evaluation techniques related to learning.

Along with advanced level comprehension, the study should develop competence in applying theory in routine teaching-learning activities. The relationship of learning to such factors as individual differences, differences in socio-economic background, social and emotional maturity, attitudes, beliefs, and physical well being, etc., should be considered. The study should also have some emphasis on techniques for assessing individual learning progress. Also, the study should promote an understanding of the findings of teacher effectiveness research in relation to student achievement and classroom management.

GUIDELINE 5: The program should develop advanced levels of comprehension in the areas of curriculum development and instructional processes.

The study should provide advanced level consideration of the theories, principles, and practices of curriculum development, instructional design, instructional processes, and learning evaluation; and recent curriculum innovations, changes in subject matter content, information about new instructional strategies, and use of the computer in the instructional and organizational setting.

GUIDELINE 6: The program should provide for the study of the principles, practices, and techniques of instructional leadership and some study in the areas of organization and administration.

Preparation in this area should develop a comprehension of principles and practices of instructional leadership, their development, current status and trends. Consideration should be given to the techniques such as the orientation of media personnel, in-service education programs, individual and group conferences. In addition, the study should include consideration of school organization and administration; theories and principles of management; personnel appraisal; instructional systems, including their design, implementation, and evaluation; school finance; decision making; and leadership roles in education. The level of competence achieved should enable the instructional leader to serve effectively as a member of an educational management team.

GUIDELINE 7: The program should include an emphasis on research and use of appropriate statistics.

Work in this area should assist the prospective supervisor in gaining greater insights and skills in the use of techniques of action research and in designing and carrying out research projects. The program should provide adequate opportunities for experiences involving knowledge of significant educational research, its implications, and its use.

GUIDELINE 8: The program should include a period(s) of internship-field experiences in a supervisory role.

The field experiences should include work under the direct supervision of a supervisor, or other instructional leader of recognized capability, for an extended period (as long as necessary to develop a pre-determined level of competency).

The field experience should be composed of special projects and problems related to the area of library media programs or advanced study seminars.

C. Competencies Needed by Media Supervisors

The role of the media supervisor will vary from that of the educational leader who coordinates the overall instructional program in a school system to one who concentrates on providing the framework for a strong library/media program that extends and enriches the system-wide instructional program.

1.0 Competencies in Administration

The ability to systematically plan and organize the total library/ media program in relation to the overall educational goals and objectives of the school system, including the management of media and human resources. The candidate will be able to:

System-wide Goal Development

1.1 Organize manpower, money, equipment, methods, and materials to meet long and short range goals

1.2 Formulate effective policies and appropriate procedures as needed for establishment, maintenance, development, and evaluation of the library/media program and media support services

1.3 Develop and monitor a continuous evaluation system to identify operational strengths and weaknesses of the library/media programs at both the building and system levels

1.4 Identify and justify personnel needs and advise in the selection and placement of media personnel

1.5 Follow established administrative channels and procedures within the school system in developing the system-wide library/media budget, based primarily on identification of student and teacher needs, and appropriate purchasing procedures for meeting these needs

1.6 Provide leadership in the redesign, design, and development of library/media facilities

1.7 Provide leadership in evaluating and applying all aspects of technological advancements that may have an impact on system-wide instructional programs

1.8 Provide guidance and direction in planning and implementing system level and building participation in local, State, and national networking efforts among all types of libraries

System-wide Goal Implementation

1.9 Establish and maintain an atmosphere in which individuals work harmoniously and at optimum levels

1.10 Apply managerial leadership skills to the attainment of identified goals

1.11 Assist building-level staff in the development of library/media programs that demonstrate direct relationship to the overall educational objectives of the building

1.12 Assist building-level media coordinators and principals in budget preparation and purchasing procedures

1.13 Assist building-level media coordinators in applying overall management competencies to individual building programs

1.14 Exhibit effective communication skills while serving as an information specialist directly involved in varied phases of information management for staff and faculty

1.15 Provide leadership in the use of the computer for administrative purposes as well as for learning

2.0 Competencies in Supervision/Management

The ability to provide leadership in establishing and maintaining a strong library/media program by exhibiting knowledge and understanding of the principles of management and supervision; maintaining open communications with various groups; facilitating special and related services; assuring liaison with the community; and initiating and participating in activities that advance the library/media program. The candidate will be able to:

Staff Supervision and Development

2.1 Establish an organizational climate which staff perceive as receptive to their needs

2.2 Construct alternative solutions to interpersonal conflicts based on adequate knowledge of another person's values, needs, and feelings

2.3 Plan and conduct appropriate staff development activities based on assessed needs

External Relationships/Communications

2.4 Participate in a leadership role in professional organizations at the local, regional, State, and national levels

2.5 Participate in a leadership role in the development of cooperative efforts among various types of libraries

2.6 Interpret the purposes, needs, and accomplishments of the overall media program to the community

Program and Service Development

2.7 Establish, with appropriate staff, system-level evaluation and selection policies and procedures for all types of materials and equipment

2.8 Protect the right of freedom of access to materials and information through support for a local school board adopted selection policy, as well as other means

2.9 Establish policies and procedures for efficient acquisition, receiving, and inspecting of materials and equipment at the building and system levels

2.10 Provide technical assistance to system level specialists on the evaluation of materials relating to specific subject areas and assist building-level staff in evaluation, selection, and acquisitions processes

2.11 Establish cataloging and classification policies and procedures for organizing collections in the school system

2.12 Assist building-level media coordinators in effective organization of materials and equipment within the individual building

2.13 Provide leadership to support and encourage full use of all materials, equipment, and services of all media centers through flexible scheduling practices to meet user needs; convenient arrangements of space, furniture, and resources; and a receptive attitude toward individual and group requests for services

3.0 Competencies in Curriculum Development

The ability to maintain continuous and direct involvement as a leader in the cooperative development of a system-wide program that assures that library/media skills are attained through use of carefully selected teaching processes which are closely related to the content of a topic of study. The candidate will be able to:

Curriculum Theory and Planning

3.1 Provide leadership in determining objectives for the library/media skills program as an integral part of the instructional program of the school system

3.2 Contribute meaningful information on the functions of learning resources in various curriculum models and theories

3.3 Coordinate the acquisition of learning resources needed to support curricular programs prior to their implementation

3.4 Develop policies and plans with media staff and teachers which assure articulated student attainment of library/media skills

3.5 Participate, as a member of the educational team, in the design and construction of the system-wide curriculum, promoting consideration of alternative teaching-learning strategies and appropriate media

3.6 Assist system-level content specialists and supervisors in planning and developing appropriate media presentations for various disciplines

Curriculum and Program Evaluation

3.7 Assist building-level media coordinators in examining the impact of curricular guidelines on building level library/media programs

3.8 Provide consultative and technical assistance to increase the effective participation of building-level media coordinators in curricular and instructional design processes

3.9 Contribute to system-wide evaluation and accountability studies and projects which may have an impact on library/media programs

3.10 Assist building-level media coordinators in assessing and analyzing ways in which materials and equipment can be used most effectively in given learning situations

Instructional Theory and Design

3.11 Assist building-level media coordinators in designing an appropriate library/media skills program which meets specific objectives and is integrated into all areas of instruction

3.12 Apply principles of instructional design to the development of flexible and varied inservice programs and student study skills programs, providing for individual and group needs

3.13 Assist building-level media coordinators and staff in designing effective articulated library/media skills lessons consistent with district-wide curriculum guides

Research Utilization

3.14 Interpret and use research including findings relative to instructional effectiveness and student achievement

3.15 Involve building-level media coordinators in research relevant to building level and system-level programs

School Learning

3.16 Exhibit knowledge and understanding of teaching-learning theory and practice, including strategies to elicit learning.

D. Completion of Program and Recommendation for Certification

Each candidate must be recommended by the appropriate university officials and field experience supervisors.

INSTRUCTIONAL TECHNOLOGY SPECIALIST-TELECOMMUNICATIONS

A. Role of Instructional Technology Specialist–Telecommunications

The Instructional Technology Specialist in Telecommunications certification is appropriate for those persons who, through advanced study and preparation, have developed extensive knowledge and skill in certain technical areas of media services, particularly in the design, development, and production of instructional materials in the various formats (audio, video, electronic); in the selection, organization, and operation of various types of telecommunication equipment; in the programming, production, and utilization of televised (cable, open-air broadcast, satellite) media; and in the application of communications technology in the teaching and learning process.

The Instructional Technology Specialist in Telecommunications may be identified by a variety of titles such as Telecommunications Specialist, Director of Telecommunications, Media Director, and Coordinator of Technology Services. The Telecommunications specialist serves as a member of the management team charged with the responsibility for planning, implementing, and evaluating an educational program relevant to the needs of the student population in a school system or in an individual school.

The program for the preparation of the Telecommunications Specialist should be characterized by flexibility, to allow for differences in the educational background and experiences of each candidate. Programs of study for all students should have common elements, but the mix of these elements will vary for individual programs of study.

B. Program Guidelines for the Preparation of Instructional Technology Specialist–Telecommunications

The program of preparation should be characterized by flexibility, individualization, and personalization to allow for differences in the capability, experiences, and educational background of candidates. Programs of study for all students will contain common elements; however, the mix of these elements will vary for individual programs of study. It is assumed that candidates admitted to this master's degree program will have obtained teaching certification in a North Carolina approved area and will have exhibited leadership potential necessary for a supervisory position. The program should be sufficiently flexible to allow students who have already obtained a master's level certification, specifically certification in another area of media and/or curriculum and supervision, to obtain those additional competencies not previously addressed.

GUIDELINE 1: The program should provide a general understanding of the broad area of media, technology, and telecommunications as it relates to teaching and learning theory and practice and to the K-12 instructional program.

Emphasis should be placed on the acquisition of knowledge concerning the contribution of different types of media and telecommunication systems in promoting effective learning by students who vary widely in interests, capabilities, and needs; the development of skills that enable candidates to exercise a leadership role in the application of technology to the accomplishment of specific learning objectives; and the role of the telecommunications specialist in the planning, evaluation, and revision of instructional programs.

GUIDELINE 2: The program should provide for the development of competencies in planning, organizing, implementing, interpreting, and evaluating a broad telecommunications program at the school system level.

The program of study and practicum experience should provide indepth preparation in the application of a systematic process of analyzing instructional problems and the development of validated practical solutions to them (instructional design); preparation in the design and production of instructional materials to meet specific goals and objectives (media production); and preparation in the study of various types of electronic media (television, computers, videodisc) and the contribution that each can make to the teaching/learning process. Study in this area should also include evaluation, selection, and utilization procedures for hardware, courseware and instructional systems appropriate to the K-12 program.

GUIDELINE 3: The program should develop knowledge and provide experiences designed to promote the acquisition of several different kinds of leadership styles and understanding of when each style should be used.

Preparation under this guideline should develop a comprehension of principles and practices of instructional leadership–their development, current status, and trends. Consideration should be given to the techniques of teacher orientation, in-service education programs, individual and group conferences, and planning/research investigations. The study should include consideration of school organization and administration as it relates to the competence needed by the instructional leader to serve effectively as a member of an educational management team.

GUIDELINE 4: The program should provide an understanding of the purpose, organization, and administration of school systems with special emphasis on the role of the telecommunications specialist in developing and directing activities related to current technology.

Study in this area should develop understanding of the organization and administration of the school, curriculum patterns, and the telecommunications specialist's role in relating the school program to the community. Emphasis should be placed upon establishment of appropriate technology, learning environments, record keeping and inventory, school finance, personnel supervision, and management of program and resources.

GUIDELINE 5: The program should develop an individual awareness of the need for continued learning on the job and for intelligent consumption of research and current information.

The program should provide opportunities for the telecommunications specialist to develop the habits and attitudes necessary for continued learning. Emphasis should be placed on maintaining the professional capability needed to interpret the trends and developments resulting from the frequent change in the area of telecommunications.

C. Competencies Needed by Instructional Technology Specialist–Telecommunications

1.0 Knowledge and Understanding

An understanding in depth of the broad area of telecommunications (hardware, software, delivery systems, production techniques) and its application to the K-12 curriculum. The candidate will be able to:

1.1 Understand the broad area of telecommunications as it relates to teaching and learning theory and practice

1.2 Identify appropriate uses of the various types of technology in the K-12 curriculum

1.3 Provide information on current trends and contemporary issues in the telecommunications area (e.g., ethics, copyright, censorship)

1.4 Demonstrate the ability to use the various types of technology predominant in K-12 schools

1.5 Demonstrate a broad understanding of school organization and operation, principles of management and supervision, principles of personnel performance appraisal, facility design, equipment and material selection, and school finance

1.6 Demonstrate the ability to write educational specifications for hardware, software, and instructional systems which incorporate knowledge of current trends and technological advancements in the telecommunications area

2.0 Program Planning and Implementation

The ability to systematically plan, implement, and evaluate a specialized program of telecommunications in relation to the overall goals and objectives of the school system. The candidate will be able to:

2.1 Develop annual and long-range plans for a comprehensive program of instructional telecommunications including automated systems and production capabilities

2.2 Provide leadership for a school or school system in using the various types of technology in the K-12 instructional program

2.3 Implement procedures and direct activities for developing program policies and guidelines (e.g., system-wide media selection policy, copyright guidelines, equipment selection procedures)

2.4 Establish and implement a process for the monitoring and evaluation of the telecommunications program with particular emphasis on using modern technology for data collection and evaluation

2.5 Maintain an effective public relations program which communicates to administrative staff, teachers, parents, and the public the vital contributions of the telecommunications program to learning.

3.0 Evaluation, Selection, and Integration

The ability to apply basic principles of evaluating, selecting and producing media as an integral component of the instructional program. The candidate will be able to:

3.1 Recognize the school's or system's organizational pattern, curriculum, and the instructional objectives affecting the selection and/or production of media

3.2 Recognize the characteristics unique to each media format and produce media tailored to varying abilities, interests, and needs

3.3 Develop criteria for evaluation of locally produced media

3.4 Evaluate and select production equipment, materials, and supplies

3.5 Provide leadership for a school system's media advisory committee or computer advisory committee in evaluating and selecting media in accordance with the school system's long-range plan

4.0 Production and Utilization

The ability to design and implement procedures and activities for designing, producing, and using the various types of materials (audio, visual, video) to facilitate the teaching and learning process. The candidate will be able to:

4.1 Develop criteria for decision making concerning the desirability of locally produced media as opposed to available commercially produced media

4.2 Apply the principles of learning communication model(s) and theory to the design of instructional media

4.3 Determine most appropriate formats and design specifications for meeting identified instructional objectives

4.4 Translate media design specifications into workable production plans and produce graphic, projected, and electronic instructional media

5.0 Organization and Management

The ability to manage complex operations involving instructional telecommunications including facility design, work scheduling, and budgeting. The candidate will be able to:

5.1 Organize elements of instructional telecommunications for effective use by students, teachers, and administrators

5.2 Develop and implement effective procedures for selection, purchase, maintenance, and service for instructional equipment and telecommunication systems

5.3 Plan, organize, and manage media production facilities and telecommunication systems

5.4 Train, supervise, and evaluate personnel involved in instructional technology and telecommunications

5.5 Promote effective use of various types of media through staff development activities for instructional staff

5.6 Identify sources of information on current and future trends and developments in instructional telecommunications

5.7 Establish and maintain desirable relationships with entire educational community, including students, administrators, parents, and lay citizens

5.8 Ensure professional growth by participating in innovative continuing education programs

INSTRUCTIONAL TECHNOLOGY SPECIALIST--COMPUTERS

A. Role of Instructional Technology Specialist--Computers

The Instructional Technology Specialist--Computers certification is appropriate for those persons who, through advanced study and preparation, wish to develop extensive knowledge and skill in the area of computer technology (hardware, courseware, programming techniques, sources of information) and its application to the K-12 curriculum. The Instructional Technology Specialist--Computers has the role of decision-maker, consultant, and specialist in advising administrators, teachers, and other professional personnel on computer technology. The computer specialist serves as a member of a management team and has responsibilities that include computer skills curriculum planning and implementation; staff development; hardware and courseware evaluation selection, and integration; production and utilization of resources; and management of personnel and facilities. The computer specialist may be identified by a variety of titles such as computer specialist, computer coordinator, computer resource teacher, instructional specialist for computers, or computer education supervisor.

Preparation programs for the Instructional Technology Specialist--Computers should be sufficiently flexible to allow for differences in the capability, experiences, and educational background of candidates. A candidate for this certification should enter the master's degree program with a North Carolina teaching certification and demonstrate supervisory potential. However, candidates already possessing master's level certification need only obtain those competencies not addressed in a previous program.

B. Program Guidelines for the Preparation of Instructional Technology Specialist--Computers

The program of preparation should be characterized by flexibility, individualization, and personalization to allow for differences in the capability, experiences, and educational background of candidates. Programs of study for all students will contain common elements; however, the mix of these elements will vary for individual programs of study. It is assumed that candidates admitted to this master's degree program will have obtained teaching certification in a North Carolina approved area and will have exhibited leadership potential necessary for a supervisory position. The program should be sufficiently flexible to allow students who have already obtained a master's level certification, specifically certification in curriculum and/or supervision, to obtain those additional competencies not previously addressed.

GUIDELINE 1: The program should provide a general understanding of the broad area of computer technology as it relates to teaching and learning theory and practice and to the K-12 content areas.

The program should provide a general study of computer technology (hardware, courseware), programming techniques (at least one educational programming language), sources of information, and its relationship to established learning theory and to instruction in a K-12 curriculum. A study of the contemporary issues (e.g., ethics, copyright) and trends both in the development of the technology and in education should be part of the program of study. The program also should provide experience with the field of computing in which the computer is used as a tool for and as an object of instruction.

GUIDELINE 2: The program should provide for the development of competencies in planning, organizing and implementing, interpreting, and evaluating a computer skills instructional program at school system levels.

The prospective computer specialist should develop the ability to plan and implement the educational aspects for a computer skills program with respect to theories, principles, and practices of curriculum development, instructional processes, and learning evaluation. The Instructional Technology Specialist–Computers should have the ability to develop computer skills curriculum and/or activities based on an understanding of the needs and interests of the learner. Study in this area should also include evaluation, selection, and utilization techniques for computer hardware and courseware appropriate for a computer skills program.

GUIDELINE 3: The program should develop knowledge and provide experiences designed to promote the acquisition of several different kinds of leadership styles and understanding of when each style should be used.

Preparation under this guideline should develop a comprehension of principles and practices of instructional leadership–their development, current status and trends. Consideration should be given to the techniques of teacher orientation, in-service education programs, individual and group conferences, and planning/research investigations. The study should include consideration of school organization and administration as it relates to the competence needed by the instructional leader to serve effectively as a member of an educational management team.

GUIDELINE 4: The program should provide an understanding of the purpose, organization, and administration of school systems with special emphasis on the role of the computer specialist in developing and directing activities related to computer technology.

Study in this area should develop understanding of the organization and administration of the school, curriculum patterns, and the computer specialist's role in relating the school program to the community. Emphasis should be placed upon establishment of appropriate computer technology learning environments, record keeping and inventory, school finance, personnel supervision, and management of program and resources.

GUIDELINE 5: The program should develop an individual awareness of the need for continued learning on the job and for intelligent consumption of research and current information.

The program should provide opportunities for the computer specialist to develop the habits and attitudes necessary for continued learning. Emphasis should be placed on maintaining the professional capability needed to interpret the trends and developments resulting from the frequent change in the area of computer technology.

C. Competencies Needed by Instructional Technology Specialist–Computers

The role of the Instructional Technology Specialist–Computers may vary from one of an educational leader who coordinates the overall computer technology program in a school system or a specific school to one who concentrates at a certain grade level, a certain subject area, or a certain educational process.

1.0 Knowledge and Understanding

1.1 Identify hardware and courseware features, purposes, and proper care procedures

1.2 Demonstrate the ability to set-up and operate computers typical of the types predominant in the K-12 school program

1.3 Demonstrate the ability to execute package programs common to instructional use in the K-12 curriculum

1.4 Provide information on the different programming languages suitable for elementary and secondary students

1.5 Demonstrate the ability to write in at least one educational programming language (e.g., BASIC, Logo, Pascal, COBOL) at a level sufficient to teach a course in that language

1.6 Identify sources of information on computer technology topics appropriate for the K-12 curriculum

1.7 Understand the broad area of computer technology as it relates to teaching and learning theory and practice

1.8 Identify appropriate uses of the computer in the K-12 curriculum

1.9 Provide information on contemporary issues and trends in computer technology (e.g., ethics, copyright)

2.0 Program Planning and Implementation

Ability to plan, organize, develop, implement, interpret, and evaluate a computer skills program as part of the ongoing instructional program. The candidate will be able to:

2.1 Develop and modify annual and long-range goals for a comprehensive computer skills program as part of the ongoing instructional program

2.2 Provide leadership for a school system or school computer committee on using computer technology in the K-12 instructional program

2.3 Implement procedures and direct activities for developing computer skills program guidelines and materials

2.4 Develop, implement, and monitor programs for computer skills staff development activities

2.5 Establish and implement procedures for evaluation of the computer skills program; in particular, procedures that use the computer for data collection and evaluation

3.0 Evaluation, Selection, and Integration

Ability to apply criteria and strategies for evaluation, selection, and integration/use of hardware and courseware into the ongoing instructional program. The candidate will be able to:

3.1 Identify criteria, strategies, and reviewing services/information sources for hardware and courseware evaluation, selection, and integration

3.2 Develop, implement, and monitor procedures for evaluation, selection, and use of instructional materials for computer skills

3.3 Develop, implement, and monitor procedures for evaluation, selection, and use of computers in the K-12 curriculum to meet established instructional objectives

3.4 Provide leadership for a school system or school media advisory or computer committee in evaluating and selecting computer skills materials in accordance with the school system computer plan and existing curriculum

4.0 Production and Utilization of Resources

Ability to design and implement procedures and activities for using computer skills materials and computer hardware, as well as for developing/producing computer-related materials to facilitate the teaching/learning process. The candidate will be able to:

4.1 Develop, implement, and monitor staff development activities on strategies needed to integrate computer technology into the K-12 curriculum and on the use of computer skills materials

4.2 Provide leadership to a computer committee in identifying computer skills materials that need to be developed

4.3 Design and conduct activities on techniques and courseware (e.g., authoring systems, teaching aid generators) that can be used to produce computer skills materials

4.4 Identify and provide information and training on hardware peripherals and related software appropriate for enhancing computer use

5.0 Organization and Management

Ability to establish, implement, and manage computer procedures and practices involving program, personnel, resources, and facilities. The candidate will be able to:

5.1 Recognize the school system's or school's organizational pattern, curriculum and instructional objectives, finance regulations, personnel policies, and building facility restrictions affecting the computer skills program

5.2 Understand and use management skills in dealing with the program, personnel, resources, and facilities applicable to the computer skills program

5.3 Assist with the acquisition process for computer resources: hardware, courseware, and facility items

5.4 Provide leadership and assistance for the organization and maintenance of an inventory of school system or school computer resources

SCHOOL ADMINISTRATORS

A. Role of School Administrators

The school administrator is defined as one who performs administrative duties on a system-wide or school-wide basis and normally includes assistant principal, principal, assistant superintendent, and superintendent. The chief function of the school administrator is to stimulate and obtain action for performance of the education task. In the role of instructional leader, the administrator promotes the educational development of students and the professional development of staff members.

Preparation programs for the administrator comprise two stages and normally take place through the cooperative efforts of universities and public schools. The goal of the first or initial stage of preparation is to provide the prospective school administrator with the competencies, to at least the minimum level, deemed essential for the beginning administrator. It usually culminates in a graduate degree of at least a master's in school administration. The second or advanced stage of preparation has as its goal to provide the school administrator with those competencies and capabilities required in rendering high levels of service in top administrative positions. The advanced stage of preparation normally culminates in the completion of a sixth-year or doctoral program. There are three levels of certification as follows: (1) Administrator I (Master's Degree), (2) Administrator II (sixth year), and (3) Administrator III (Doctoral Degree).

B. Program Guidelines for the Preparation of School Administrators

Educational programs designed to develop the foregoing competencies will place as much emphasis upon educative process as upon educative content, for the process of administration is as much a reflection of affective understanding as it is of cognitive learning. Emphasis, then, must be placed upon experiential learning through simulations, case studies, field studies, internships, and other instructional activities which require the individual to interact with a "real" administrative environment. The program for the preparation of the administrator should be characterized by flexibility, to allow for differences in the educational background and experiences of each candidate. Programs of study for all students should have common elements, but the mix of these elements will vary for individual programs of study. The master's degree, sixth-year, and doctoral programs should be planned in accordance with the guidelines below. The second and third levels of preparation would logically provide for more breadth and depth of preparation in all appropriate areas. Advanced levels of preparation, especially at the doctoral level, should provide for specializations within the area of administration.

GUIDELINE 1: The program should provide advanced levels of study in the humanistic and behavioral components of preparation.

Study under this guideline should reflect upper level consideration of the problems of education from a philosophical, historical, behavioral, and social sciences point of view. Preparation in this area demands a reasonable command of the principles and concepts in the areas of political science, economics, sociology, anthropology, and social psychology that relate directly to educational administration. The program should be implemented through a carefully designed, comprehensive, interdisciplinary approach including all areas. The study should emphasize the application of the principles and concepts in planning educational programs and in solving educational problems.

GUIDELINE 2: The program should develop knowledge and provide experiences designed to promote the acquisition of several different kinds of leadership styles and understanding of when each style should be used.

Study under this guideline should include examination of the purpose, structure, and operation of organizations in a complex society, giving particular attention to the educational organization and its relationship to other organizations. The dynamics of leadership should be considered in relation to the various roles and responsibilities of the school administrator. The future on-site school administrator will be a management specialist, head of a management team that will perform the administrative tasks of the school. Therefore, the role of the administrator as a management specialist should be emphasized.

GUIDELINE 3: The program should provide extensive study in the areas of organization and administration.

Areas of study under this guideline include policies and procedures relating to personnel administration and evaluation, the administration of educational programs, and administration relating to funds and facilities. The study in each area should be problem-oriented and provide extensive cognitive study accompanied by simulations and direct experiences designed to develop decision-making capability.

The program should provide for the prospective administrator competencies in the following administrative processes: (1) discovering; (2) diagnosing; (3) goal setting; (4) planning; (5) decision-making; (6) establishing priorities; (7) organizing; (8) delegating; (9) communicating; and (10) evaluating.

Advanced preparation should include studies, activities, and experiences necessary to provide a comprehension of the principles and developments in school board relationships, school law, professional personnel responsibilities and negotiations, school finance, and public relations.

GUIDELINE 4: The program should develop increased comprehension of principles and practices in curriculum development and instructional processes and the competence to interpret the principles and practices to others.

Preparation under this guideline should emphasize the role of the administrator as an instructional leader including: (1) principles and developments concerning the learner and the learning process; (2) knowledge of curriculum and competence in providing curriculum leadership; (3) knowledge and skills related to group dynamics and curricular improvements; (4) principles and developments in supervision of professional and non-professional personnel; and (5) knowledge and understanding of research on teacher effectiveness in relation to pupil learning.

GUIDELINE 5: The program should include internship-administrative field experiences.

Experiences at preparation levels I and II should include at least one of the following:

The student is placed with an outstanding administrator on a full or part-time basis for an extended period of time. The student intern would be supervised jointly by the practicing administrator and the institutional staff. The student who is already a practicing administrator would undertake directed activities in administration in connection with seminars, problem courses, and school surveys.

GUIDELINE 6: The program should develop an awareness of the need for continued learning on the job, for intelligent consumption of research, and for carrying out research activities.

C. Competencies Needed by School Administrators

The competencies deemed essential for the administrator are described in the four competency clusters outlined below. It is assumed that individuals may possess the competencies in various degrees. It is further assumed that one might demonstrate an effective leadership style without possessing all of the competencies normally associated with such leadership.

1.0 A Personal Value System

- 1.1 Exhibit the personality, vision, insight, and skill needed to inspire individuals and groups to work closely and effectively
- 1.2 Demonstrate a positive self-concept as evidenced by confidence in decision-making and by the ability for critical self-assessment
- 1.3 Demonstrate a sensitivity to values and value systems which affect the behavior of individuals and groups including the ability to be empathetic with those who express divergent ideas, aspirations, and/or orientations
- 1.4 Demonstrate those humanistic characteristics required to work effectively with individuals and groups
- 1.5 Exhibit emotional stability by confronting issues with poise
- 1.6 Demonstrate a willingness to shoulder the responsibilities of leadership

2.0 An Effective Leadership Style

- 2.1 Utilize appropriate leadership style under varying conditions and in varying situations
- 2.2 Understand and utilizes effective human relations skills
- 2.3 Communicate effectively with individuals and groups including staff, students, and community groups
- 2.4 Set realistic personal and organizational goals
- 2.5 Exhibit effective decision-making skills and demonstrate the ability to make wise decisions
- 2.6 Demonstrate the ability to motivate individuals and groups to reach appropriately high levels of performance

2.7 Exhibit the ability to effectively utilize conflict resolution strategies

2.8 Exhibit appropriate leadership skills in recognizing, managing, and resolving stressful situations

2.9 Demonstrate the ability to identify and develop strategies for organizational change

2.10 Maximize individual and group efforts by posing challenges, providing inspiration, and giving practical assistance

2.11 Demonstrate the skills required for defining roles, delegating responsibility, and maintaining accountability

2.12 Demonstrate and utilize authority at the operational level

2.13 Understand the effective use of influence skills and effectively apply influence strategies and negotiating skills while building group purpose and developing internal and external networks

3.0 A Functional Knowledge of Curriculum and the Instructional Process

3.1 Demonstrate knowledge necessary to develop, implement, evaluate, and the instructional program of the school

3.2 Demonstrate skills in assessing needs and setting instructional goals and objectives

3.3 Demonstrate the ability to coordinate human resources in defining and implementing curriculum

3.4 Demonstrate knowledge and skills necessary for improvement of instructional design, techniques, and application of learning theory, ranging from individual to staff development

3.5 Demonstrate knowledge of and ability to use community resources to enrich the school program

3.6 Demonstrate knowledge of conceptual relationship of various disciplines in structuring school programs

3.7 Demonstrate the ability to develop an educational system that provides for the diverse needs of pupils from different social, economic, and ethnic environments

4.0 Management Skills

4.1 Demonstrate the ability to conduct needs assessment and task analysis for designing appropriately responsive programs which are effectively implemented and evaluated

4.2 Demonstrate knowledge and skills in planning, budgeting, personnel utilization, and facility management

4.3 Evidence effective interviewing skills

4.4 Demonstrate the skills necessary to carry out effective performance appraisal, the development of individual improvement plans, and formative and summative evaluation of programs

4.5 Demonstrate knowledge of and responsiveness to safety factors relevant to the school setting

4.6 Exhibit knowledge and understanding of application of laws, policies, and regulations pertinent to the operation of a school

4.7 Exhibit the organizational skills needed for effective and efficient scheduling, record keeping, and the acquisition, inventory, and distribution of materials

4.8 Exhibit knowledge of computers for instructional and administration uses

4.9 Demonstrate the ability to comprehend the interdependence of curriculum and organizational patterns for effective articulation

4.10 Exhibit knowledge and skills in interpreting and utilizing research including findings relative to teacher effectiveness and student achievement

4.11 Exhibit the skills required to administer non-instructional school programs

4.12 Demonstrate effective communication skills in oral and written forms

4.13 Exhibit effective conferencing skills

4.14 Exhibit a sound philosophy of discipline and pupil management

D. Operational Policies

1. Local school systems should share responsibility for the identification and development of future administrators. When possible, local systems should budget funds to support such procedures as developmental leave, testing programs, local seminars, and released time for initial tryout performance.

2. The plan for recruiting, selecting, and screening students should be designed to assure that all students accepted in the program of preparation, insofar as possible, will have the potential considered essential for effective administrative leadership. All admissions should be provisional with continuous evaluation thereafter.

3. There should be supporting evidence from the field which would attest to traits and behaviors related to potential success in school administration. Successful

experience in administration outside the education field should have consideration.

4. The first phase of the program should be designed to (a) provide orientation to school administration, (b) assist the individual in assessing their interest and commitment to positions of educational leadership, and (c) provide opportunities for more than one faculty member and practicing administrator to assess the candidate's potential for positions of school leadership.

5. After the candidate has been regularly admitted to the program and progresses from one phase of preparation to another, faculty advisors and supervisors of the internship program should make periodic evaluations of progress and take specific action designed either to encourage continuation or a reformulation of career goals. In addition, program exit evaluation processes and procedures should be developed to determine student proficiency in relation to the competencies identified, and to assess program effectiveness.

E. Completion of Program and Recommendation for Certification

Each candidate for the various levels of certification must be recommended by the appropriate university officials and supervising administrators.

F. Authorization of Service

To qualify to serve as an elementary, secondary or union principal, one must complete at least the first level of preparation. At higher levels of administration, the second stage of preparation is required (e.g., the superintendency requires as a minimum the Administrator II Certificate).

CURRICULUM-INSTRUCTIONAL SPECIALIST

A. Role of Curriculum-Instructional Specialist

The curriculum-instructional specialist is defined as one whose primary concern is the improvement of learning opportunities through the provision of instructional leadership. The supervisor, as the instructional or program specialist, has the role of decision maker, consultant, and specialist in advising administrators, teachers, and other professional personnel. Responsibilities include curriculum development, instruction, and staff development. The terms as used are generic and include such titles as curriculum consultant, curriculum director, school-based curriculum coordinator, helping teacher, and assistant superintendent for instruction. The curriculum-instructional specialist or generalist serves as a member of a management team charged with the responsibility for planning, implementing, and evaluating an educational program relevant to the needs of the student population in a school and/or school system. In theory and practice, the functions of the supervisor and the administrator share many commonalities. Differences occur in the degree to which a competency area is practiced, and the scope of decision making and authority associated with the two roles.

Preparation programs for the curriculum-instructional specialist comprise two stages. The initial stage should occur prior to the first experience in a supervisory position. The second or advanced stage should follow as the specialist seeks to improve his/her performance and/or seeks positions of increasing responsibility. The goal of the initial stage is to develop, to at least the minimum level, those competencies deemed essential for the beginner in a supervisory role. This stage is the primary responsibility of the preparing university, working cooperatively with school systems in which field experiences are provided. It culminates in at least a master's degree in curriculum-instruction. The second or advanced stage of preparation is focused on the development of those competencies and capabilities required in rendering higher levels of service as a generalist or specialist in top supervisory positions. The advanced stage is the joint responsibility of the university and school systems. It requires both formal university study and planned sequential on-the-job experiences. It culminates in the completion of a sixth-year or doctoral degree program. There are three certification levels as follows: Curriculum-Instructional Specialist I (Masters Degree), Curriculum-Instructional Specialist II (Sixth-Year Program), Curriculum-Instructional Specialist III (Doctoral Degree).

B. Program Guidelines for the Preparation of Curriculum-Instructional Specialists

The program of preparation should be characterized by flexibility, individualization, and personalization to allow for differences in the capability, experiences, and educational background of candidates. Programs of study for all students will contain common elements; however, the mix of these elements will vary for individual programs of study. It is assumed that candidates committed to the program will have exhibited a reasonable leadership potential in their work with students, professional associates, and the general public.

Educational programs designed to develop the competencies identified will place as much emphasis upon educative process as upon educative content, for the process of supervision is as much a reflection of affective understanding as it is of cognitive learning. Emphasis, then, must be placed upon experiential learning through simulation, case studies, field studies, internships, and other instructional activities which require the individual to interact with a "real" teaching-learning environment. The master's degree, sixth-year, and doctoral programs should be planned in accordance with the guidelines below. The second and third levels of preparation would logically provide for more breadth and depth of preparation in all appropriate areas. Advanced levels of preparation, especially at the doctoral level, should provide for in-depth specialization.

GUIDELINE 1: The program should provide advanced level study in the humanistic and behavioral components of preparation.

Study under this guideline should reflect upper level consideration of the problems of education from a philosophical, historical, behavioral, and social sciences point of view. Preparation in this area demands a reasonable command of the principles and concepts in the areas of political science, economics, sociology, anthropology, and social psychology that relate directly to education supervision. The program should be implemented through a carefully designed, comprehensive, interdisciplinary approach including all areas. Emphasis should be placed upon the application of the principles and concepts learned in planning educational programs and in solving educational problems.

GUIDELINE 2: The program should provide comprehensive study of the dynamics of human behavior.

Preparation in this are should include a careful study in the variety of ways in which people work together successfully and an analysis of both individual and group behavior procedures for helping people in their personal adjustments and interpersonal relations. The program should provide (1) knowledge of and considerable practice in group processes and their specific applicability to the work of the supervisor; (2) experiences designed to foster the candidate's appreciation of individuality and sensitivity to the feelings of others; (3) opportunities for trying out and evaluating the candidate's leadership skills; and (4) opportunities for demonstrating creativity and initiative in activities of the supervisor.

GUIDELINE 3: The program should develop advanced level understanding of teaching-learning theory, including evaluation techniques related to learning.

Along with advanced level comprehension the study should develop competence in applying theory in routine teaching-learning activities. The relationship of learning to such factors as individual differences, differences in socio-economic background, social and emotional maturity, attitudes, beliefs, and physical well being, etc., should be considered. The study should also have some emphasis on techniques for assessing individual learning progress. Also, the study should promote an understanding of the findings of teacher effectiveness research in relation to student achievement and classroom management.

GUIDELINE 4: The program should develop advanced levels of comprehension in the areas of curriculum development and instructional processes.

The study should provide advanced consideration of the theories, principles, and practices of curriculum development, instructional processes, and learning evaluation; and recent curriculum innovations, changes in subject matter content, information about new instructional strategies, and use of the computer in the instructional and organizational setting.

GUIDELINE 5: The program should provide for the study of the principles, practices, and techniques of instructional leadership and some study in the areas of organization and administration.

Preparation in this area should develop a comprehension of principles and practices of instructional leadership, their development, current status, and trends. Consideration should be given to the techniques such as the orientation of teachers, in-service education programs, individual and group conferences. In addition, the study should include consideration of school organization and administration; theories and principles of management; personnel appraisal; instructional systems, including their design, implementation, and evaluation; school finance; decision making; and leadership roles in education. The level of competence achieved should enable the instructional leader to serve effectively as a member of an educational management team.

GUIDELINE 6: The program should provide advanced level preparation in an area of specialization.

Under this guideline two areas of specialization are provided as follows: (1) graduate level preparation in the subject or area of specialization in which the specialist expects to devote a major portion of his/her time should be required. This means that at the secondary level, one's specialization should be in a teaching field or fields; at the elementary level the specialization should be in academic areas related to the elementary curricula. (2) One might specialize in the area of curriculum-instruction which means that he/she would be identified as a generalist.

If one's interest is Reading, the candidate would be required to obtain a graduate certificate in that field. In addition to the competencies needed for the graduate level program in reading, the program for the curriculum-instructional specialist includes a fourth cluster of competencies as follows:

(1) Ability to outline a model reading program, including in the model the following elements: planning, organizing, staffing, directing, coordinating, reporting, budgeting, and evaluation;

(2) Ability to conduct an assessment of resources and constraints within an educational unit;

(3) Ability to use school records with understanding and insight;

(4) Ability to plan, conduct, and evaluate programs of in-service education in development and content reading for personnel within the educational unit;

(5) Ability to prepare annotated bibliographies, research papers, reports on current and historical research in reading and reading-related fields;

(6) Ability to plan and conduct a research project in reading; and

(7) Ability to develop, in cooperation with a media specialist, a model to be used in selecting materials for, and evaluating a literature program.

GUIDELINE 7: The program should include an emphasis on research and use of appropriate statistics.

Work in this area should assist the prospective supervisor in gaining greater insights and skills in the use of techniques of action research, and in designing and carrying out research projects. The program should provide adequate opportunities for experiences involving knowledge of significant educational research, its implications, and its use.

GUIDELINE 8: The program should include a period(s) of internship-field experiences in a supervisory role.

The field experiences should include work under the direct supervision of a supervisor, or other instructional leader of recognized capability, for an extended period (as long as necessary to develop a pre-determined level of competency). The field experience for advanced preparation levels should be composed of special projects and problems related to the area of specialization or advanced study seminars.

C. Competencies Needed by Curriculum-Instructional Specialists

The role of the curriculum-instructional specialist may vary from that of the educational leader who coordinates the overall educational program in a school system or a particular school to one who concentrates at a specific grade level, subject area, or educational process.

1.0 Competencies in Knowledge and Understanding

1.1 Understanding in depth of the purposes and role of the school in a complex, urbanized, technological society as an agent in the transmission of culture and as an agent of social change

1.2 Knowledge from the fields of humanistic and behavioral studies related to the understanding and interpretation of educational problems

1.3 Knowledge and understanding related to school organization and operation, including related theory and research findings

1.4 Knowledge and understanding of the principles of management and supervision

1.5 Knowledge and understanding of the principles and practices of personnel performance appraisal

1.6 Knowledge and understanding of educational planning in relation to the design, implementation, and evaluation of instructional systems

1.7 Knowledge and understanding related to facility design, equipment and material selection, and school finance

1.8 Knowledge and understanding of leadership roles under varying conditions and in varying situations

1.9 Knowledge and skill in interpreting and utilizing research including findings relative to teacher effectiveness and student achievement

1.10 Knowledge and understanding at advanced levels of teaching-learning theory and practice, including strategies to elicit learning

1.11 Knowledge and understanding in the area of human relations, including factors that promote harmonious social and personal relationships and factors that cause alienation and distrust between and among individuals and groups

1.12 Knowledge about and the ability to provide leadership in the effective utilization of knowledge generated by specialists in upgrading the school program

1.13 Knowledge and understanding in depth of the discipline area of specialization

2.0 Professional Competencies

2.1 Ability to bring instructional theories and strategies to bear on the instructional process and to lead in the implementation of instructional programs

2.2 Ability to work harmoniously and effectively with individuals of diverse personal capabilities, cultural backgrounds, and individual characteristics in improving their professional performance

2.3 Ability to work effectively with individuals and groups in developing, adapting, and altering instructional programs to serve changing needs

2.4 Ability to employ sound planning practices and techniques in the performance of professional tasks

2.5 Ability to analyze and evaluate teaching-learning implications for pupil development (cognitive, affective, psychomotor)

2.6 Ability to determine the proper mix of what to teach and how to teach it in order to achieve optimum results in a particular teaching-learning situation

2.7 Ability to serve as a resource agent for teachers and pupils by suggesting learning media and materials appropriate for teachers and pupils in carrying out specific learning tasks

2.8 Ability to provide leadership and service in planning, implementing, and evaluating professional development programs

2.9 Ability to prescribe individual growth plans for professional improvement of faculty

2.10 Skill in selecting and promoting the effective use of a wide variety of equipment, media, and supplies in the promotion of effective learning

2.11 Ability to utilize knowledge of the computer for instructional and administrative purposes

3.0 Competencies Relating to Personal Attributes, Commitment, and Values

3.1 The strength, personality, vision, insight, and skill needed in inspiring and leading others in the achievement of desirable educational goals

3.2 Humanistic qualities that reflect an empathetic understanding of and respect for individuals and groups who are motivated by divergent ideas and aspirations

3.3 Commitment to a humanistic personal value system in making decisions and in working with others

3.4 Rational convictions relating to the purposes of education, the nature of the learner, and the function of schools

3.5 Ability to communicate effectively, using a variety of mediums in diverse situations

D. Completion of Program and Recommendation for Certification

Each candidate for the various levels of certification must be recommended by the appropriate university officials and field experience supervisors.

To qualify to serve as a Curriculum-Instructional Specialist, one must have completed at least the first level of preparation. Advanced levels of preparation are recommended.

SCHOOL SOCIAL WORK

A. Role of the School Social Worker

The school social worker is part of the pupil personnel services team, sharing responsibility for assisting in the prevention and resolution of difficulties that obstruct a child's ability to derive optimal benefit from the school experience. In order to work effectively with students, their families, and other school personnel, the school social worker must be competent in and have knowledge of the following areas: social work philosophy, social work practice, school social work practice, and community resources. The competencies required in each of these areas are described below.

B. Program Guidelines for the Preparation of School Social Work Personnel

Preparation for the school social work position may be at three levels as follows: Bachelor's, Master's, and Doctorate. The undergraduate preparation should prepare for professional practice by providing understanding of basic principles and methods of social work. Graduation from the undergraduate program entitles one to the A Certificate (Level I). The graduate study leading to the MSW gives an advanced and more intense understanding of the basic principles and methods of social work plus additional specialized knowledge of more breadth and depth of treatment techniques of "interventive strategies." Upon completion of the MSW program, one is entitled to a graduate certificate in social work (Level II).

Doctoral level study is generally considered to be preparation for a position of considerable responsibility in policy-making, program planning, administration, independent research, or university level teaching. Preparation at this level entitles one to the advanced graduate certificate or Level III.

GUIDELINE 1: The program content and curriculum shall be consistent with the standards of the Department of Public Instruction for approving programs to certify graduates for the practice of school social work as well as with the curriculum policy statements of the Council on Social Work Education.

Foundation Content: The program should provide liberal arts content as a part of the theoretical foundation and it should be structured and completed in such a way that the student has mastered it before proceeding on to upper level social work courses which build on that foundation. Appropriate foundation content is usually found in the social-behavioral-biological disciplines. Students are required to master the foundation content, including content in education courses, essential to understanding the school as a social institution in a "community of services" and the practice knowledge essential to school social work practice.

Professional Core Content: The program for preparation of a school social worker should provide specialized opportunity for achieving understanding in depth of the philosophy, values, and skills of social work.

Social Work Practice - Practice content is evaluated on the degree to which its provides the opportunity for acquisition of knowledge and development of skills consistent with the demands of first level professional practice. Students must be provided opportunities to develop skills in functioning within organizations and the ability to perform practice activities which require information management, assessment, and resource management and development skills. Interpreting social work roles and generating professional support systems are also skills which must be developed for first-level professional social workers since they often work in organizations which have few, if any, other professional social workers. Additionally, learning opportunities should include a focus on the necessity of self-evaluation as well as evaluation of the availability and effectiveness of social resources and services.

Social Welfare Policy and Services - Social welfare policy and services content should include the philosophical and historical perspectives of social welfare services and social work practice, and should foster the development of not only descriptive but also analytical and critical understanding of social welfare programs, policies, and issues. The manner in which first-level practitioners can use policy, and contribute to policy and service development and modification, should be a clearly identified part of practice content.

Human Behavior and the Social Environment - Content in human behavior and social environment should develop in the student an understanding of the total person's functioning in relation to his/her environment. This includes knowledge and understanding of people as individuals, as members of families and other groups, and as members of organizations and communities, as well as the interrelation of biological, psychological, and socio-cultural systems and their effect on human development and behavior.

Research - Preparation for effective social work requires development in the student of an appreciation for social research and an understanding of its impact on and application to practice. Social research skills developed in the program include understanding data reported in published reports and journals, understanding research strategies used by agencies when seeking to evaluate their activities, and collecting, analyzing, and using information from one's workload in order to achieve intervention objectives.

Field Instruction - The program of preparation should provide specialized opportunity for social work internships. A student preparing for school social work will have an internship of at least 300 clock hours which will provide the opportunity to practice the roles of the school social worker in a public school setting and to acquire general information about the philosophy, policies, and practices of the public school structure and the Pupil Personnel Services Team concept.

GUIDELINE 2: The program shall make specific, continuous efforts to assure enrichment by the provision of racial, ethnic, and cultural diversity in all categories of persons related to the program, and throughout the curriculum.

Equity shall be assured to faculty from racial and ethnic minority groups in recruitment, retention, promotion, tenure, assignment, and remuneration of all personnel, including class, field, research and other faculty, administration, and support staff. Equity shall be assured to students from racial and ethnic minority groups in recruitment, student admission, field placement, and financial aid. The program shall provide clear course objectives, outlines, and content incorporating racial, ethnic, and cultural perspectives throughout the curriculum.

GUIDELINE 3: The program director shall have primary responsibilities for the coordination and educational leadership of the program, with adequate time and appropriate resources to fulfill those responsibilities and to carry appropriate collaboration efforts with the Department or School of Education and the local education agency.

GUIDELINE 4: The program shall have full-time faculty adequate in number and range of expertise, based upon education and professional practice, to achieve its specified objectives.

There shall be continuity in the assignment of a core of full-time faculty who hold a minimum of the master's degree in social work to insure stability in achievement of the essential program functions. Faculty who teach the content of social work practice and coordinate field instruction shall hold a minimum of a master's degree in social work and shall have two years or more of professional and social work practice experience. In assignment of faculty, due recognition shall be given to the time needed to engage in student advising, to select and evaluate field instruction settings, to perform administrative tasks, to discharge community obligations related to purposes of the programs, and to participate in activities of professional organizations.

GUIDELINE 5: The program shall have an annual budget allocation from the educational institution sufficient to carry out the specified program objectives.

The allocation shall be sufficiently stable to permit both short-term and long-term program planning by faculty and administration. The administration of the institution and the program shall provide physical facilities and equipment necessary for the attainment of program objectives. The administration of the institution and the program shall provide library holdings necessary for the attainment of program objectives.

GUIDELINE 6: The program shall have procedures, compatible with those of the institution, which clearly identify appropriate criteria and procedures for admission and continuation into the social work program and into the school social work specialty.

The program shall have clearly defined procedures for assuring acquisition of foundation content before students enter social work courses for which such content is prerequisite. The program shall have clearly defined procedures for assuring acquisition of school social work specialty content.

GUIDELINE 7: The program shall have policies and practices that specify student rights and responsibilities within the social work program.

Students shall be free to organize in their own interests as students, and appropriate organization shall be encouraged by the program. Students shall participate in the formulation and modification of policy affecting academic and student affairs, consistent with the policies of the institution. Policies and practices shall include procedures for the termination of student continuation in the professional social work degree program.

C. Competencies Needed by School Social Work Personnel

Social Work Philosophy

1.0 Understand and subscribe to the professional social work code of ethics and accept social work as a profession with a methodology which can be learned

2.0 Demonstrate a mature awareness of self including motivation, biases, limitations, and strengths

3.0 Understand and respect differences, including varying lifestyles, value systems, cultural and racial differences

Knowledge of Social Work Practice

4.0 Demonstrate skill in interpersonal relationships

- 4.1 Develop and maintain constructive relationships
- 4.2 Demonstrate skill in the art of listening
- 4.3 Demonstrate proficiency in understanding and responding to non-verbal communications
- 4.4 Recognize and control own prejudices and recognize and deal with the attitudes of others
- 4.5 Handle anger and the negative feelings of others
- 4.6 Demonstrate understanding and respect for the concept of authority and use self constructively
- 4.7 Demonstrate the ability to accept all behavior as having purpose and recognize that the degree of understanding affects ability to help

5.0 Demonstrate skill in the identification and analysis of problems

- 5.1 Secure data relevant to the assessment of problems as seen by the student, the parent, and the school
- 5.2 Dscern significant relationships between facts and make logical interpretations of such data as a basis for planning and service
- 5.3 Present information clearly and concisely both verbally and in writing

6.0 Demonstrate knowledge of human behavior and the social environment

- 6.1 Draw on theory and training relative to normal growth and development, abnormal behavior, development of self-concept, family, and group dynamics
- 6.2 Draw on theory and training relative to economic pressures, institutional and community expectations, ethnic values, subcultural influences, economic, and peer pressures

7.0 Demonstrate knowledge of social work methodologies

- 7.1 Recognize and apply the principles of social casework

7.2 Recognize and apply the principles of social group work

7.3 Demonstrate general knowledge of social work services relative to community organizations and administration

7.4 Understand the range of diverse settings in which social work is practiced

7.5 Demonstrate general knowledge of the application of social work services in the various human services settings

Knowledge of School Social Work Practice

8.0 Provide direct service intended to support the school system's educational function focusing on developmental concerns, crisis resolution, and remediation

8.1 Understand the structure of the school system and role of social work within that structure

8.2 Understand the process of policy formulations and implementation in the school system

8.3 Demonstrate knowledge of all legislation and court decisions affecting school-age children and their families

8.4 Understand learning theories and curriculum development

8.5 Coordinate resources effectively to meet student needs

8.6 Demonstrate knowledge about student rights and responsibilities

8.7 Work constructively with school personnel, family, and community agency personnel

9.0 Provide direct service to students in such areas as:

9.1 Abuse and neglect

9.2 Educational difficulties which may be related to cognitive limitations, non-attendance, economical deprivation, or emotional disturbance

9.3 Behavioral disruption, destructiveness, being withdrawn or alienated

9.4 Physical or mental impairment with subsequent adjustment problems

Knowledge of Community and Resource Development

10.0 Serve on community task forces, commissions, committees, boards, or organizations as a school social worker representing pupil personnel/school system

11.0 Assess resources, identify services and assist in resource development

11.1 Participate in interagency conferences and staffings

11.2 Accept appointments to interagency organizations

11.3 Collaborate with other agencies in the assessment of needs

COMPETENCIES NEEDED FOR GRADUATE CERTIFICATION

In addition to competencies essential for undergraduate certification, persons desiring graduate certification must have an earned Master of Social Work Degree and the following competencies:

1.0 Ability to be an effective interpreter of the school to the community and community to school

2.0 Ability to organize, mobilize, and coordinate community resources

3.0 Ability to recruit, organize, and supervise volunteer services to supplement resources for student needs

4.0 Ability to participate in systematic program evaluation

5.0 Ability to serve as a resource person and/or consultant both within the school system and the community on issues related to school social work

COMPETENCIES NEEDED FOR ADVANCED CERTIFICATION

In addition to competencies essential for graduate level certification, persons desiring advanced certification must have earned a minimum of 30 graduate hours beyond the Master's degree, and demonstrate the following competencies:

1.0 Ability to design, organize, and manage a school social work program for a school system

2.0 Ability to supervise staff and/or school social work interns from both graduate and undergraduate programs

3.0 Ability to plan and conduct systematic evaluation of school social work program

4.0 Ability to manage fiscal matters

5.0 Ability to design and conduct inservice workshops for school social work personnel

6.0 Ability to participate in planning activities with administrators of the school system, resource agencies, and other relevant professionals

COUNSELOR EDUCATION

A. Role of the School Counselor

The School Counselor has primary responsibility for the leadership and implementation of a counseling program that consists of individual and group counseling, consulting, assessment, career development, program evaluation, and the coordination of these functions. Through these functions, school counselors provide developmental, preventive, and remedial services for students; services that are aimed at assisting students with their academic, career, and personal development.

B. Guidelines for the Preparation of School Counselors

To provide the prospective school counselor with competencies in human growth and development, social and cultural foundations, the helping relationship, group work, lifestyle and career development, assessment, research and evaluation, professional orientation, and the school setting, the graduate student's program should include preparation as specified by the guidelines described hereinafter. The program of preparation should be planned as a logically organized whole in the continuation of previous study and experience and according to performance on the screening procedures of the institution.

There are three levels of preparation: Master's Degree (entry preparation), Sixth Year, and Doctorate (advanced preparation). The Master's Degree should provide preparation required by each guideline, and the Sixth Year and Doctorate Programs should be designed to develop both breadth and depth in the same areas as well as training in counselor supervision.

Prospective counselors should not be forced to fit into a single pattern of courses. Provision should be made for self-pacing, independent study, and personalized programs of study that recognize individual needs as well as changing school philosophies and policies. The attainment of competencies will be emphasized. It is recognized that the attainment of the mandated competencies as well as the necessary supervised experiences may require an expanded graduate program of studies beyond the traditional Master's degree.

GUIDELINE 1: The program will provide a broad understanding of the nature and needs of individuals at all developmental levels.

Emphasis will be placed on psychological, sociological, and physiological approaches. Studies in human behavior, personality theory, and learning theory will be included.

GUIDELINE 2: The program will include studies of ethnic groups, cultural diversity, changing gender roles, population patterns, changes in the family, and differing life patterns.

Such disciplines as the behavioral sciences, economics, and political science may be included.

GUIDELINE 3: The program will include studies of (a) philosophic bases of helping relationships; (b) counseling theory, supervised practice, and application; (c) consultation theory, supervised practice, and application; and (d) an emphasis on development of counselor and counselee (or consultee) self-awareness and self-understanding.

GUIDELINE 4: The program will provide studies of group theory, types of groups, and group practices, methods, dynamics, and facilitative skills.

This area will also include supervised practice.

GUIDELINE 5: The program will include studies of vocational choice theory, the relationship between career choice and life style, sources of occupational, educational, and personal/social information, career decision-making processes, and career development exploration techniques.

GUIDELINE 6: The program will include the development of a framework for understanding the individual, including methods of data gathering and interpretation, individual and group testing, case study approaches, and the study of individual differences.

GUIDELINE 7: The program will include studies of statistics, research design, and development of research and demonstration proposals.

It will also provide understanding of standards relating to the development of research proposals and the use of human subjects, as well as the development and evaluation of program objectives.

GUIDELINE 8: The program will provide studies of the goals and objectives of professional organizations, code of ethics, legal considerations, standards of preparation, certification, licensing, and role identity of counselors and other student services professionals.

GUIDELINE 9: The program will include studies of the various components of the environment in which school counselors work.

These studies will give special attention to the knowledge and skills needed to develop, implement, and evaluate a comprehensive program of school counseling services.

GUIDELINE 10: The program will provide supervised course-related laboratory experiences throughout the preparation program.

These laboratory experiences will provide both observation and participation in specific activities. They might include role-playing, listening to tapes, viewing video tape playbacks, testing, organizing and using records, preparing and examining case studies, using career information materials, and interviews with field practitioners.

GUIDELINE 11: The program will provide opportunities for supervised counseling practicum experiences, providing interaction with individuals and groups actually seeking services from counselors.

Some of these individuals and groups should come from the environment in which the counselor education student is preparing to work.

GUIDELINE 12: The program will provide opportunities for internship experiences in school settings.

The internship will include all activities that a professional school counselor would be expected to perform. For those students who have no prior work experience in schools, an intensified or expanded internship is provided.

C. Competencies of the School Counselor

The school counselor is a specially trained individual who has substantial knowledge of the behavioral sciences, and an understanding of the school setting and the educational needs of students (K - 12), knowledge and skills that are considered basic in the preparation of professional counselors.

The competencies for the school counselor are herein described under nine categories which reflect the current thinking concerning the preparation of school counselors as recommended by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), and recognized by the National Board of Certified Counselors (NBCC) and the North Carolina Board of Registered Practicing Counselors.

1.0 Human Growth and Development

Includes studies that provide a broad understanding of the nature and needs of individuals at all developmental levels. Emphasis is placed on psychological, sociological, and physiological approaches. Also included are such areas as human behavior, personality theory, and learning theory.

A trained school counselor will have knowledge of:

1.1 Life-span theories of physiological, intellectual, emotional, attitudinal, and social human development, including proponents and behavioral indicators

1.2 Self-concept development including major theories, proponents, influencing factors, and behavioral indicators

1.3 Personality development including major theories, proponents, influencing factors, and behavioral indicators

1.4 Normal and abnormal behavior including primary psychological and sociological characteristics and behavioral indicators

1.5 Learning theory including major theories, proponents, characteristics, factors influencing applications, and behavioral indicators

A trained school counselor will have skills to:

1.6 Identify and explain an individual's psychological and social development in the context of major life-span theories of human growth and development

1.7 Apply principles of major life-span theories of human growth and development to facilitate change

2.0 Social and Cultural Foundations

Includes studies of ethnic groups, cultural diversity, changing gender roles, population patterns, differing life patterns, and changes in marriage and the family.

A trained school counselor will have knowledge of:

2.1 Trends and changes in society including educational, political, sociological, economic, and technological influences, conflicts within society and methods of resolution, and responses to change

2.2 Trends and changes in human roles including traditional and male and female roles and factors influencing gender role development

2.3 Family situations and trends including traditional and non-traditional systems, effective and ineffective family interactions, factors influencing interactions and relationships, and parent, child, and sibling roles

2.4 Multicultural trends including characteristics and concerns of culturally diverse groups

A trained school counselor will have skills to:

2.5 Explain the impact of major societal changes and trends on individuals and groups in society

2.6 Apply principles of intervention to facilitate coping among individuals and groups confronting societal changes

2.7 Explain family interaction patterns

2.8 Explain effective and ineffective behaviors of culturally diverse groups

2.9 Apply principles of helping relationships to eliminate substance abuse

2.10 Explain factors influencing and/or causing substance abuse, person abuse, and excessive stress

2.11 Explain the nature of and factors influencing discrimination against persons on the basis of human diversity with respect to race, creed, color, national origin, and handicapping condition

3.0 The Helping Relationship

Includes (a) philosophic bases of helping relationships; (b) counseling theory, supervised practice, and application; (c) consultation theory, supervised practice, and application;

and (d) emphasis on development of counselor and counselee (or consultee) self-awareness and self-understanding.

A trained school counselor will have knowledge of:

3.1 Counselor and consultant characteristics and behaviors that influence helping processes including verbal and nonverbal behaviors and personal characteristics, constructs, and skills

3.2 Counselee and consultee characteristics and behaviors that influence helping processes, including verbal and nonverbal behaviors and personal traits, characteristics, capabilities, and life circumstances

3.3 Counseling and consultation theories, including major theories, proponents, advantages and limitations, factors considered in application, and behavioral manifestations

3.4 Basic and advanced helping skills, including philosophic and theoretical bases, proponents, advantages and limitations, factors considered in applications, and behavioral manifestations

3.5 Implementation of helping processes including goal setting, process control behaviors (e.g., contracting, beginning, ending, and terminating sessions), determination of process parameters, responsibilities and appropriate behaviors, and methods of evaluation of effectiveness

A trained school counselor will have skills to:

3.6 Explain counselor and consultant orientations to helping processes

3.7 Explain counselor and consultant verbal and nonverbal behaviors in helping processes

3.8 Explain and self-evaluate levels of helping skills

3.9 Explain internal and external factors affecting helping relationships

3.10 Apply basic and advanced skills in the helping processes

3.11 State the rationale for the appropriate use of counseling and consulting processes

4.0 Groups

Includes group theory, types of groups, and group practices, methods, dynamics, and facilitative skills. This area also includes supervised practice.

A trained school counselor will have knowledge of:

4.1 Principles of group dynamics including group process components, developmental stage theories, and behavioral indicators

4.2 Theories of group counseling including proponents, commonalities, distinguishing characteristics, pertinent research, and literature

4.3 Group counseling methods including group counselor orientations and behaviors, therapeutic conditions, group members roles and behaviors, criteria and methods for selecting group members, and evaluation of group effectiveness

4.4 Methods and skills of leading large group activities for instructional and informational purposes

A trained school counselor will have skills to:

4.5 Explain stages of group development, including factors affecting stage progression

4.6 Explain group leadership styles

4.7 Explain counselor orientations to group counseling

4.8 Explain the use of group counselor verbal and nonverbal behaviors

4.9 Apply group member selection criteria and procedures

4.10 Apply basic and advanced group counseling skills, including process comments, process controls, maintenance, and effectiveness evaluation

4.11 Apply group leadership skills in large group settings for instructional and informational purposes

5.0 Lifestyle and Career Development

Includes such areas as vocational choice theory, relationship between career choice and lifestyle, sources of occupational, educational, and personal/social information, career decision-making processes, and career development exploration techniques.

A trained school counselor will have knowledge of:

5.1 Major career development theories

5.2 Major career counseling theories

5.3 Major approaches to career guidance and education

5.4 Major theories of career and life style decision-making

5.5 Occupational, educational, and personal social information including local and national sources, print media and computerized information systems, and interactive computer sources

A trained school counselor will have skills to:

5.6 Explain major career development theories

5.7 Apply basic and advanced career counseling, guidance, and educational skills, including facilitation of counselee self-exploration and evaluation, use of assessment instruments and techniques, integration of occupational and educational information, and evaluation of effectiveness

5.8 Apply occupational and educational information systems

5.9 Apply principles of educational and post-secondary planning

6.0 Assessment

Includes the development of a framework for understanding the individual, including methods of data gathering and interpretation, individual and group testing, case study approaches, and the study of individual differences.

A trained school counselor will have knowledge of:

6.1 Types of educational and psychological assessment, including group and individual approaches to intelligence, aptitude, achievement, interest, and personality assessment, and similarities and differences among these approaches

6.2 Theoretical bases for assessment techniques and methods of interpretation of assessment data and information

6.3 Validity, including methods of establishing content, construct and empirical types of validity

6.4 Reliability, including methods of establishing stability, internal, and equivalent types of reliability

6.5 Major assessment methods, including group and individual test and inventory methods, behavioral observation, and computer-managed and computer-assisted methods

6.6 Psychometric statistics, including types of test scores, norms measures of central tendency, indices of variability, standard errors, and correlations

6.7 Principles of using assessment data and interpreting information in helping processes

6.8 Ethical, legal, and social considerations in the use of assessment data and information in helping processes

A trained school counselor will have skills to:

6.9 Explain intelligence, aptitude, achievement, interest, and personality assessment

6.10 Explain selection criteria for various types of assessment methods

6.11 Apply validity considerations to specific assessment methods and situations

6.12 Apply reliability considerations to specific assessment methods and situations

6.13 Select assessment methods appropriate in practical situations

6.14 Apply and interpret psychometric statistics in practical situations

7.0 Research and Evaluation

Includes such areas as statistics, research design, and development of research and demonstration proposals. It also includes understanding standards relating to the development of research proposals and the use of human subjects as well as the development and evaluation of program objectives.

A trained school counselor will have knowledge of:

7.1 Basic types of research, including historical, descriptive, developmental, case and field studies, correlational, causal-comparative, true experimental, quasi-experimental, and action research

7.2 Basic statistics, including types of data, distribution statistics, indices of variability, standard errors, relationship statistics, comparison statistics, and basic nonparametric statistics

A trained school counselor will have skills to:

7.3 Explain basic types of research and their practical applications

7.4 Apply basic statistics in practical situations

7.5 Apply principles of program evaluation in practical situations

8.0 Professional Orientation

Includes goals and objectives of professional organizations, code of ethics, legal considerations, standards of preparation, certification, licensing, and role identity of counselors and other student services professionals.

A trained school counselor will have knowledge of:

8.1 Ethical standards, including their evolution, methods of change, and applications to various professional activities

8.2 Professional roles and functions including similarities and differences with other types of professionals

8.3 Professional organizations including membership benefits, activities, services to members, and current emphases

8.4 History of the helping professions including significant factors and events influencing the evolution of the school counseling profession

8.5 Professional preparation standards including their evolution and current applications

8.6 Professional credentialing including certification, licensure, and accreditation practices, standards, and activities

A trained school counselor will have skills to:

8.7 Apply professional ethical standards in practical situations

8.8 Explain varying helping professional roles and functions, and their interrelationships

8.9 Explain professional organization roles and activities

8.10 Explain the relationship between professional preparation standards and current professional roles and functions

8.11 Explain the various forms of professional credentialing applicable in the helping professions

9.0 The School Setting

Includes studies of the various components of the environment in which school counselors work. Special attention is directed to the development and management of a comprehensive school-based counseling program.

A trained school counselor will have knowledge of:

9.1 The role of school counseling in relation to the total school program at the elementary, middle, and/or secondary levels

9.2 School counseling services and the functional relationships among them, including individual and group counseling, consulting, group guidance activities, and coordinating services such as student orientation, appraisal, referral, placement, information, and follow-up services

9.3 The relationship between school counseling services and other school and community-based support services

9.4 Competencies required of counselors in the delivery, management, and supervision of school counseling services

9.5 Materials, equipment, and facilities required in the delivery of school counseling services

9.6 Planning processes for the development of appropriate program objectives

9.7 The organization and administrative structure of schools, including staffing patterns

9.8 Program assessment, planning, and evaluative methods for school counseling services

9.9 Characteristics of exceptional students including educably handicapped, learning disabled, academically gifted, and physically handicapped

9.10 Aspects of curriculum planning including the required Standard Course of Study in North Carolina

9.11 Publications and policies of North Carolina related to the practice of school counseling

A trained school counselor will have the skills to:

9.12 Assess, plan, implement, manage, and evaluate a comprehensive school counseling program

9.13 Develop appropriate referral procedures, and make referrals to both in-school and out-of-school professionals and/or agencies

9.14 Maintain an organized, functional, and up-to-date counseling center/office, including a career resource center

9.15 Assist with referral processes for the identification of exceptional students

9.16 Assist the school staff with interpretation of test results to examine instructional objectives and do curriculum planning

9.17 Develop public relations by providing parent and teacher groups and various media with information about school counseling services, including program descriptions, post-secondary opportunities, career development information, and special events (e.g., "Special Person of the Month," "Handicap Awareness Week," "Career Day")

9.18 Develop appropriate procedures for vocational and educational placement

9.19 Use computers to assist in the delivery of counseling services

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SCHOOL PSYCHOLOGY

A. Preparation of School Psychologists

School Psychology in Education

Psychology provides an important knowledge and disciplinary base for educational procedures. School psychologists are a primary source for translation of psychological knowledge to school practice. Professional school psychologists are trained in human behavior (including learning, social, and emotional development) and how it is manifested in the process of schooling. Much of the knowledge base for the practice of school psychology provides an empirical basis for educational practice.

School psychologists receive training in a data-oriented approach to problem-solving, providing a link between scientist and practitioner approaches to schooling. They are trained to approach problems from a systemic view and to consider the many interacting factors that influence educational outcomes. As children's lives become more complex and as family, school, and other social structures change, this systemic view assumes greater importance. In concert with other educationally related disciplines, school psychology can make an important contribution to school effectiveness.

Preparation

School psychology certification requires a graduate-level degree with training in both psychology and education. Programs are designed to achieve explicitly stated objectives, based upon the goals of professional practice in applied settings, and include substantial supervised practica and internship experiences as part of the planned program of study. Training programs in school psychology prepare individuals at the specialist (sixty semester hours) or doctoral levels for employment in school systems or agencies providing services to school-age children and their families. As learning specialists, school psychologists view the learning process as the interaction among characteristics of the learner, the teaching process, the task, and socio-cultural environmental variables. Areas of training in psychology include normal and abnormal development, learning and motivation, consultation, counseling and other interventions, psychological and educational assessment, statistics, and research. Training in education includes educational theory, organizational and systems theory, curriculum design, and educational methods and interventions. Emphasis on specific areas of training varies among university programs.

Both specialist and doctoral level programs include an integrated, coordinated, and comprehensive internship. The internship consists of 1200 hours occurring at or near the end of the training program. At least 600 hours occurs in a school setting. (These requirements are currently in effect for doctoral programs and will become effective for specialist programs on July 1, 1992.) The program includes practica experiences appropriate to the specific training objectives of the program. Practica experiences are distinct from and occur prior to the internship.

Programs are generally housed in Departments of Education or Psychology, are titled School Psychology, and are clearly identifiable as unique organizational units. It is expected that programs are supported at a level consistent with that provided to comparable program units within the university.

Courses at the specialist and doctoral levels are offered within a planned, supervised, and integrated program of study. The curriculum clearly differentiates the level of preparation for doctoral study as being advanced in breadth and/or depth beyond that for sixth-year study. Doctoral training may also include specialized areas of focus or skill development.

Students successfully completing a State-approved university training program in school psychology are eligible for licensure by the State Board of Examiners of Practicing Psychologists as a Psychological Associate or Practicing Psychologist and for certification by the State Department of Public Instruction at the sixth-year or doctoral levels. If the Program is nationally approved by the National Association of School Psychologists (via the NCATE folio review), graduates are automatically qualified to apply for certification by the National School Psychology Certification Board.

B. Guidelines for the Preparation of School Psychologists

The graduate program provides the prospective school psychologist with a psychological knowledge base and competencies in professional practices, psychological and psychoeducational assessment and interventions, consultation, and program development and evaluation. Areas of preparation are noted in the following content guidelines.

GUIDELINE 1: Foundation Areas

a. Psychological Foundations.

Preparation in this area includes core content areas of psychology that provide a basis for practice knowledge and skills. Content areas may include human development and learning (normal and abnormal), personality theory, human exceptionalities (including individual differences), cultural diversity, social and biological bases of behavior, inferential statistics and research design, psychometric theory, and organizational and systems theory (doctoral level only).

b. Educational Foundations.

Preparation in this area includes understanding fundamental areas of education and schooling. Educational foundation areas include educational philosophy and organization, basic curriculum design, research on effective schools and teaching, and learning styles and environments.

GUIDELINE 2: Professional Practice and Values

Preparation in this area involves: knowledge of the history of and professional issues in school psychology; understanding roles and functions of school psychologists in school and community systems; developing a school psychology program in the schools; knowledge and application of ethical principles, standards of practice, laws, policies, and regulations; and demonstrating effective communication and relationship skills.

GUIDELINE 3: Psychological and Psychoeducational Assessment

Preparation in this area provides competencies in psychological and educational assessment for individuals, groups, and systems (doctoral level only), including the ability to: assess the learning, development, and adjustment characteristics of students, including environmental factors and task demands; conduct assessments in the areas of behavioral/emotional functioning, cognition, adaptive behavior, and academic performance; evaluate and select assessment procedures based on psychometric information and the characteristics of the student(s); use a variety of assessment procedures; and use assessment information to formulate recommendations relevant to the referral questions, addressing both instructional program needs and placement eligibility criteria.

GUIDELINE 4: Psychological and Psychoeducational Interventions

Preparation in this area provides competency in the development, implementation, and evaluation of individuals, groups, and systems (doctoral level only) interventions. Such interventions should be utilized to address cognitive, behavioral, emotional, and academic needs and include, but are not limited to, counseling, behavior management, and cognitive remediation. Students also should be knowledgeable about a variety of motivational and alternative intervention strategies such as social skills training, cooperative learning, cognitive behavior management, and parent/family interventions.

GUIDELINE 5: Consultation and Training

Preparation in this area provides knowledge of consultation models and processes and competency in consulting with teachers, other school personnel, and parents about ways to facilitate learning and adjustment of students, school needs, and system needs (doctoral level only).

GUIDELINE 6: Program Development and Evaluation

Preparation in this area includes skills in applying research, needs-assessment, and evaluative data in the planning and implementation of programs and the ability to assist in the development and implementation of research in the schools. At the doctoral level, additional competencies should be provided in organizational development and change strategies, as well as designing and conducting program evaluations and research proposals or grants.

GUIDELINE 7: Practical Experiences

Preparation in this area should provide opportunities for trainees to gather knowledge and skills most appropriately learned in the field and to refine skills and clarify knowledge learned as part of the graduate program. Practica experiences are direct extensions of specific training activities and are completed prior to an internship experience.

GUIDELINE 8: Internship Experiences

Preparation in this area shall include an integrated and comprehensive internship consisting of 1200 hours occurring at or near the end of the training program. At least 600 hours shall occur in a school setting. (These requirements are currently in effect for doctoral programs and will become effective for specialist programs on July 1, 1992.) The internship experience should be consistent with a written plan and meet the training objective of the program.

C. Competencies Needed by School Psychologists

Academic Foundation Competencies

1.0 PSYCHOLOGICAL FOUNDATIONS

1.1 Possess knowledge of psychological foundations for practice and can describe theories and/or concepts related to:

. Human growth and development
. Personality and adjustment
. Human learning
. Exceptionalities
. Cultural diversity
. Social bases of behavior
. Biological bases of behavior
. Inferential statistics and research design
. Psychometric theory and methods
. Organizational and systems theory (doctoral level)

1.2 Recognize the interrelationship and integration of the above foundation areas in daily practice

2.0 EDUCATIONAL FOUNDATIONS

2.1 Possess knowledge of educational foundations for practice including:

. Educational organization and philosophy
. Concepts of curriculum design
. Effective schools and teaching research
. Instructional strategies
. Learning styles
. Learning climates

2.2 Recognize the interrelationship and integration of the above foundation areas in daily practice

Professional Knowledge and Application Competencies

3.0 PROFESSIONAL PRACTICE AND VALUES

Laws, Policies and Regulations

3.1 Understand and conform to relevant statutes, policies, and regulations established by Federal, State and local governments

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3.2 Recognize the role of the school psychologist in safeguarding the interests of school personnel, students, and parents with regard to personal, legal, and civil rights

Ethics and Standards

3.3 Understand and integrate into daily practice the National Association or School Psychologists and American Psychological Association Standards for Professional Practice, Ethical Principles of Psychologists, Standards for Educational and Psychological Tests, Ethical Principles in the Conduct of Research with Human Participants, and other official policy statements relevant to standards for professional practice issued by the professional associations

3.4 Deliver services consistent with professional standards of practice and codes of ethics

School Psychology Program Development and Implementation

3.5 Understand how to develop and implement a comprehensive program of school psychological services

3.6 Plan and maintain a system of accountability for service delivered.

Professional Role Within the School System/Community

3.7 Understand the organization, philosophy, goals and objectives, and methodology of schools and school systems affects practice

3.8 Demonstrate respect for and responsiveness to cultural diversity among school staff, students, and parents

3.9 Understand and be responsive to the diverse needs of special populations

3.10 Understand the social, economic, and political factors that shape and influence education and psychology at the local, State, and national levels

3.11 Demonstrate awareness of the need for continuing professional development and ongoing collegial review and support

3.12 Interpret relevant research for use by parents and school staff

Communication and Relationship Skills

3.13 Establish and maintain a cooperative and collaborative relationship with colleagues and co-workers in the best interests of school staff, students, and parents.

3.14 Effectively communicate knowledge and ideas, orally and in writing, to individuals and groups

3.15 Understand the basic principles of supervision (doctoral level).

4.0 ASSESSMENT

4.1 Demonstrate the ability to identify and assess the learning, development, and adjustment characteristics and needs of students, taking into consideration environmental factors and task demands

4.2 Demonstrate knowledge of and ability to conduct assessments in the areas of emotional functioning, behavior, cognition, psychomotor functioning, adaptive behavior, and academic performance

4.3 Demonstrate the ability to evaluate assessment instruments based on psychometric information such as validity, reliability, and standardization

4.4 Choose instruments/techniques and conduct assessments with consideration of the characteristics of the student or group of students including ethnic, cultural, socio-economic, and handicapping conditions

4.5 Collect, analyze, and integrate assessment data utilizing a variety of instruments and techniques including but not limited to:

. standardized instruments
. criterion-referenced instruments
. curriculum-based assessments
. systems of observation and interaction
. interviewing techniques
. questionnaires, checklists, rating scales

4.6 Use assessment data to formulate hypotheses that address the referral question(s) and develop recommendations that take into account environmental and cultural factors

4.7 Use assessment data to address: (1) instructional and educational programming (academic, behavioral, and social needs); and (2) program eligibility and placement

5.0 INTERVENTIONS

5.1 Assist in the planning, implementation, and evaluation of interventions consistent with the assessment hypotheses

5.2 Utilize a variety of intervention strategies in the areas of cognitive, behavioral, emotional, and academic functioning for groups and individuals, including but not limited to, counseling, behavior management, and cognitive remediation

5.3 Understand a variety of motivational and alternative intervention strategies such as social skills training, cooperative learning, cognitive behavior management, and parent/family interventions

5.4 Demonstrate the ability to initiate and maintain an effective counseling relationship

5.5 Identify the need for preventive and/or remedial interventions, at the school or systems level, that will enhance the educational attainment of students

5.6 Conceptualize and assist in developing systems level programs of prevention and/or remediation that promote the healthy development of all students (doctoral level)

5.7 Demonstrate familiarity with community resources providing services to students and parents and processes for making appropriate referrals

6.0 CONSULTATION AND TRAINING

6.1 Demonstrate knowledge of consultation models and processes

6.2 Consult with teachers, school staff, and parents about ways to facilitate learning and adjustment for individual students and groups of students

6.3 Consult with school personnel on school needs (specialist level) or system needs (doctoral level)

6.4 Interpret Federal, State, and local policies and regulations related to psychological services to parents, school staff, and other relevant groups

7.0 PROGRAM DEVELOPMENT AND EVALUATION

7.1 Critically review and apply research and/or evaluative data in decision-making related to the planning and delivery of programs.

7.2 Collaborate with other personnel to develop programs and program strategies based on needs-assessment or results-based data

7.3 Assist in the development and implementation of research in the schools

7.4 Possess knowledge needed to plan and implement organizational development and change strategies in school systems (doctoral level)

7.5 Develop evaluation hypotheses and design program evaluation strategies; conduct evaluation; and analyze, interpret, and disseminate results of the program evaluation (doctoral level)

7.6 Develop and/or coordinate research proposals or grants (doctoral level).

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EXCEPTIONAL CHILDREN PROGRAM ADMINISTRATOR

A. Role

The Exceptional Children Program Administrator plans, develops, coordinates, supervises, administers, and evaluates the effectiveness of local education agency's educational program. The program administrator provides guidance and leadership to all exceptional children program personnel. The role is performed under the general supervision of the superintendent or designee. The program administrator maintains a cooperative relationship with principals, other school personnel, other related service agencies and parents. The administrator is responsible for maintaining the program within local, State, and Federal guidelines, rules, regulations, and laws which govern exceptional children programs.

B. Program Guidelines for the Preparation of Exceptional Children Program Administrators

To enter the program, the candidate must have completed at least three years of successful teaching in an exceptional children program or service as a Speech-Language Specialist or School Psychologist. The program guidelines for the preparation of exceptional children program administrators are basically the same process for preparing general school administrators. The major difference in the preparation is in the specific exceptional children program content requirement. Educational programs designed to develop the foregoing competencies will place emphasis on the administrative process and on the educative content. Emphasis must be placed upon experiential learning through simulation, case studies, field studies, internships, and other instructional activities which require the individual to interact with a "real" administrative environment. The program for the preparation of the administrator should be characterized by flexibility to allow for differences in the educational background and experiences of each candidate. The master's degree, sixth-year, and doctoral programs should be planned in accordance with the guidelines below:

GUIDELINE 1: The program should provide advanced levels of study in the humanistic and behavioral components of preparation.

Study under this guideline should reflect upper level consideration of the problems of providing education for exceptional children from a philosophical, historical, behavioral, legal, and social sciences point of view. Preparation in this area demands a reasonable command of the principles and concepts in the areas of political science, economics, sociology, anthropology, school law, child assessment and social psychology that relate directly to educational administration. The program should be implemented through a carefully designed, comprehensive, interdisciplinary approach including all areas. The study should emphasize the application of the principles and concepts in planning education programs for exceptional children.

GUIDELINE 2: The program should develop knowledge and provide experiences designed to promote the acquisition of several different kinds of leadership styles and understanding of when each style should be used.

Study under this guideline should include examination of the purpose, structure, and operation of organizations in a complex society, giving particular attention to the educational organization and its relationship to other organizations. The dynamics of leadership should be considered in relation to the various roles and responsibilities of the program administrator. The exceptional children program administrator will be a management specialist and head of a management team that will perform the program administrative tasks of the school. Therefore, the role of the administrator as a management specialist should be emphasized.

GUIDELINE 3: The program should provide extensive study in the areas of organization and administration.

Areas of study under this guideline include policies and procedures relating to personnel administration and evaluation, the administration of exceptional children programs, and administration relating to funds and facilities. The study in each area should be problem-oriented and provide extensive cognitive study accompanied by simulations and direct experiences designed to develop decision-making capability.

The program should provide for the prospective administrator competencies in the following administrative processes: (1) discovering; (2) diagnosing; (3) goal setting; (4) planning; (5) decision-making; (6) establishing priorities; (7) organizing; (8) delegating; (9) communicating; and (10) evaluating.

Preparation should include studies, activities, and experiences necessary to provide a comprehension of the principles and developments in school board relationships, school law, professional personnel responsibilities and negotiations, school finances, transportation, and public relations including mediation.

GUIDELINE 4: The program should develop comprehension of principles and practices in curriculum development and instructional processes, and the competencies to interpret the principles and practices to others for the operation of a comprehensive continuum of coordinated programs and services.

Preparation under this guideline should emphasize the role of the administrator as an instructional leader including: (1) principles and developments concerning the learner and the learning process; (2) knowledge of curriculum and competence in providing curriculum leadership; (3) knowledge and skills related to group dynamics and curricular improvement; (4) principles and developments in supervision of professional and non-professional personnel; (5) knowledge and understanding of research on teacher effectiveness in relation to pupil learning; (6) competency in program evaluation; (7) competencies in utilizing psychological and psychoeducational assessment results; (8) competency in intervention and remediation techniques for individuals and groups; (9) skills in the consultation process; and (10) functions of building-based staff support teams. The program must model a system of communication channels for interface between special and regular education, parents, and liaison with other agencies.

GUIDELINE 5: The program should include internship-administrative field experiences.

Experiences should include at least one of the following:

The student is placed with an outstanding exceptional children program administrator on a full or part-time basis for an extended period of time. The student intern would be supervised jointly by the practicing administrator and the institutional staff. The student who is already a practicing administrator would undertake directed activities in administration in connection with seminars, problem courses, and school surveys.

GUIDELINE 6: The program should develop awareness of the need for continued learning on the job, for intelligent consumption of research, and for carrying out research activities.

GUIDELINE 7: The program should develop knowledge and skills needed to implement and maintain a system for screening, assessment, identification, referral, declassification, and termination of services for exceptional children.

GUIDELINE 8: The program should develop the administrative skills needed to translate Federal and State laws, rules, regulations, and policies into school practices.

The student should be able to participate in a due process hearing and a parent mediation process concerning the education of exceptional children.

C. Competencies Needed by Exceptional Children Program Administrators

Administration of Exceptional Children Programs

1.0 Assessment

1.1 Identify all existing exceptional children program resources available in the LEA (specific funding sources and amounts; number of teachers and support personnel presently employed; specific service alternatives available; and materials, equipment, and curricula in use)

1.2 Conduct a needs assessment to identify priorities for short and long-range planning of exceptional children programs

1.3 Interpret information gathered in the needs assessment to establish priorities for planning programs for handicapped and gifted children

2.0 Planning and Implementing Programs

2.1 Establish plan for service alternatives (resource, self-contained, etc.) to serve identified handicapped and gifted children

2.2 Write an EHA, Title VI-B project to receive funds to serve handicapped children

2.3 Write other grants and projects (ECIA Chapter I Handicapped; Early Childhood Incentive Grants, etc.) to receive funds to serve specific types of handicapped and gifted children

2.4 Develop a sequential, systematic placement procedure, including forms, in accordance with State and Federal mandates

2.5 Complete the Equal Education Opportunities Plan (EEOP)

2.6 Implement a procedure for development and implementation of Individual Education Programs in accordance with State and Federal guidelines

2.7 Allocate teacher and support personnel resources based on prioritized needs (staff plan and allocating time to function)

2.8 Conduct a headcount in accordance with State and Federal guidelines to generate State and Federal funds for exceptional children programs, including methods to verify the count

2.9 Develop procedures for conducting child-find activities to identify unserved handicapped and gifted children

2.10 Develop procedures for in-school screening to identify handicapped and gifted children in school not presently receiving services

2.11 Plan cooperative programs with other school systems and agencies to serve handicapped and gifted children

2.12 Implement and manage the operation of School-Based Committees and the Administrative Placement Committee

2.13 Recruit qualified teachers and support personnel using knowledge of affirmative action procedures

2.14 Select or approve the selection of appropriate instructional materials and equipment for exceptional children programs

2.15 Plan and implement curricula in specific categories of exceptional children programs

2.16 Implement office management procedures, including time management procedures and use of microcomputer for administration

3.0 Budgeting

3.1 Identify all local, State, and Federal funding sources that can be used to serve handicapped and gifted children

3.2 Use a basic understanding of accounting systems used for exceptional children funding sources

3.3 Allocate existing program resources (teachers, support personnel, contract service personnel, equipment, and materials) in the most cost-efficient manner

3.4 Allocate resources within constraints of specific funding sources (e.g., State funds cannot be used to purchase classroom furniture)

4.0 Communication

4.1 Communicate with parents of handicapped and gifted children in a positive and effective way

4.2 Communicate with other central office staff to facilitate cooperative planning between regular and special education

4.3 Communicate with building principals to facilitate their leadership in providing programs for handicapped and gifted children

4.4 Communicate with other service providers in the community and/or county to facilitate provision of all service required by handicapped and gifted children

4.5 Obtain and use public opinion data on special education services

4.6 Communicate with State and other local agencies using computer technology

5.0 Staff Development

5.1 Develop and implement a comprehensive system of staff development in accordance with State and Federal guidelines

5.2 Identify certification needs of teachers

5.3 Identify universities providing courses and certification programs in the education of handicapped and gifted children to meet the specific certification needs of teachers

5.4 Develop courses for certification credit for teachers seeking certification through the irregular route

5.5 Develop workshops and activities offering renewal credit for teachers already certified in special education

6.0 Program Evaluation

6.1 Design, implement, report, and utilize total program evaluation data

6.2 Use a method of data analyses for decision making and setting priorities

Application of School Law Administration of Exceptional Children Programs

7.0 Legislation and the Handicapped

7.1 Demonstrate knowledge of P.L. 94-142, Article 9, Section 504

7.2 Demonstrate knowledge of other State and Federal statutes pertaining to the education of handicapped and gifted children

7.3 Demonstrate knowledge of Rules Governing Programs and Services for Children with Special Needs

7.4 Demonstrate knowledge of confidentiality guidelines pertaining to the maintenance of exceptional children records

7.5 Demonstrate knowledge of due process procedures (due process hearing, prior notification procedures, consent for testing and placement, etc.)

7.6 Demonstrate knowledge of legal decisions, Attorney-General rulings, and other interpretations relating to P.L. 94-142, Article 9 and Rules Governing Programs and Services for Children with Special Needs

7.7 Demonstrate knowledge of procedures for auditing and evaluating compliance of exceptional children programs employed by the Division for Exceptional Children and the Office of Special Education

7.8 Demonstrate knowledge of authority of hearing officer

7.9 Demonstrate knowledge of schools' responsibility for various placements, transportation, suspension and expulsion, related services, competency tests, and evaluations

Supervision of Instruction

8.0 Personnel Management

8.1 Interview and select qualified exceptional children teachers and support personnel

8.2 Observe exceptional children teachers and support personnel to identify specific strengths and weaknesses for instructional purposes

8.3 Evaluate exceptional children teachers and support personnel

8.4 Develop a growth plan for teachers and support personnel based on needs identified in evaluations

8.5 Provide daily supervision of consultant and secretarial staff specifically assigned to the program administrator

8.6 Evaluate office staff

8.7 Lead groups of parents and teachers through training sessions on setting instructional goals

8.8 Adapt the curricula to meet the needs of a student or group

8.9 Design instructional units which specify performance objectives, instructional sequences, learning activities, materials, and evaluation process

8.10 Prepare an educational plan which includes curricular content and level, activities, alternative teacher strategies, and evaluation of learning outcomes

8.11 Evaluate the quality, utility, and availability of learning resource materials

D. Operational Policies

1. Local school systems should share responsibility for the identification and development of future administrators. When possible, local systems should budget funds to support such procedures as developmental leave, testing programs, local seminars, and released time for initial tryout performance.

2. The plan for recruiting, selecting, and screening students should be designed to assure that all students accepted in the program of preparation, insofar as possible, will have the potential considered essential for effective administrative leadership. All admissions should be provisional with continuous evaluation thereafter.

3. There should be supporting evidence from the field which would attest to traits and behaviors related to potential success in program administration. Successful experience in administration outside the education field should have consideration.

4. The first phase of the program should be designed to (a) provide orientation to program administration, (b) assist the individual in assessing his interest and commitment to positions of educational leadership, and (c) provide more than one faculty member and practicing administrator to assess the candidate's potential for positions of school leadership in exceptional children education.

5. After the candidate has been regularly admitted to the program and moves from one phase of preparation to another, faculty advisors and supervisors of the internship program should make periodic evaluations of progress and take specific action designed either to encourage continuation or a reformulation of career goals. In addition, program exit evaluation processes and procedures should be developed to determine student proficiency in relation to the competencies identified, and to assess program effectiveness.

6. The candidate must qualify for teacher certification in at least one of the handicapped areas prior to completion of program requirements.

E. Completion of Program and Recommendation for Certification

Each candidate for the various levels of certification must be recommended by the appropriate university officials and supervising administrators.

F. Authorization of Service

To qualify to serve as an exceptional children program administrator one must complete at least the master's degree level of preparation.

MENTOR

A. Role of the Mentor

The mentor performs a unique function in the total educational environment. Personnel who function in roles designed to assist others in professional growth must themselves possess competencies which facilitate the building of an environment conducive to professional growth. This certification area is appropriate for those individuals who are expected to perform job functions designed to promote growth among other adults in the school environment. These work roles include, but may not be limited to, mentor for an initially certified person and supervisor of student teachers or interns.

The criteria for this certification must be flexible in order to accommodate and recognize the varied backgrounds of candidates. Preparation may be via completion of an approved sequence of experiences at an institution of higher education or via the completion of 78 clock hours of staff development in a local education agency, which must include the North Carolina Effective Teaching Training Program (30 hours), the North Carolina Teacher Performance Appraisal Training Program (24 hours) and the North Carolina Mentor/Support Team Training Program (24 hours).

This is an add-on certification to an existing certificate. Upon documentation of successful completion of the preparation as outlined above, a candidate will be certified provisionally. Removal of the provision requires validation of one year of successful functioning during which the identified competencies have been demonstrated in a role for which the certification is appropriate. Once the provision is removed the Mentor Certification will be added to a candidate's current certificate, whether that certificate is at the undergraduate or graduate level(s) (Bachelor's, Master's, Sixth-Year, or Doctoral).

B. Program Guidelines for the Preparation of Mentors

Educational programs designed to develop the following competencies will place emphasis on the learning of cognitive concepts, as well as the application of these concepts in appropriate educational settings. Experiential learning through simulations, case studies, field experiences, and other activities requiring interaction with a "real" educational environment is appropriate for addressing the requirement for application of concepts. The program should have structure, yet be flexible enough to allow for recognition of the varied backgrounds and experiences brought by learners. Learning experiences should be designed so as to allow for application to all job roles for which the certification is designed to prepare the holder. The program should require learners to perform applications at a level commensurate with the level of the certificate to which the certification is being added (e.g. Bachelor's, Master's, Sixth-Year, Doctoral). The level of the current certificate held by the learner will determine the increasingly sophisticated levels of performance expected with breadth and depth of content concepts and application of appropriate research skills.

GUIDELINE 1: The program should develop knowledge and provide experiences in the supervision of learning designed to promote productive helping relationships and an understanding of concepts of the adult as a learner.

Study under this guideline should include an understanding of the support system and the various roles to be played in a mentoring relationship. Skills necessary for the establishment of productive helping relationships should be developed and refined. Emphasis should be given to the critical components of an effective assistance delivery process. Opportunities should be provided to work in collaborative relationships between local education agency personnel and representatives of institutions of higher education to plan experiences for persons being served by a mentoring relationship. An understanding of the conditions that promote growth should be applied to the Cycle of Assistance. Training in the use of the North Carolina Teacher Performance Appraisal Instrument should be provided.

GUIDELINE 2: The program should provide opportunities to develop effective communication skills in listening, speaking, and writing.

Preparation under this guideline should emphasize the skills needed to communicate effectively in verbal and written forms. A workable definition of effective communication should be identified. Communication blockers should be defined and effective strategies for overcoming them should be identified. An understanding of the use of non-verbal behaviors appropriate to the goal of the communication task must be developed. The program should emphasize the use of questioning techniques and strategies on a variety of cognitive levels appropriate for achieving multi-purposes. The skill of giving clear oral and written directions must be developed and practiced. Active listening skills should be developed, practiced, and applied.

GUIDELINE 3: The program should provide extensive study in the area of effective teaching to assure skill in assisting other professionals to grow.

Areas of study under this guideline include applying learning theory and research findings to classroom instruction; planning and modeling effective classroom instruction; developing and utilizing instructional materials and techniques; and identifying and effectively using available school and community resources. The learner should develop a knowledge and understanding of the importance of establishing overall curricular goals and objectives. Strategies for communicating respect for the dignity and worth of all students should be identified and reinforced. The importance of continuous participation in professional growth activities should be emphasized.

GUIDELINE 4: The program should provide opportunities to document successful experiences relevant to the role of mentoring.

Previous successful experiences in an educational environment must be documented. These include: teaching successfully for at least three years; achieving career status; leading and coordinating activities for adults in a work setting; observing and documenting classroom teaching episodes; diagnosing and prescribing growth activities based on the criteria set forth in the North Carolina Teacher Performance Appraisal Instrument; conferencing with other adults to communicate the results of observation, documentation, and diagnosis; and organizing and presenting training experiences to adults in an educational setting.

C. Competencies Needed by Mentors

The competencies deemed essential for the mentor are described in the four competency clusters below. They reflect the three skill areas of supervising, communicating, and effective teaching, as well as the practical application of these skill areas.

Supervising

1.0 The mentor demonstrates a working knowledge of mentoring relationships by:

- 1.1 Successfully completing training which defines, elaborates, and applies the nature of the mentoring role
- 1.2 Describing alternative support systems, with rationale, for persons in mentoring relationships, including but not limited to mentors, support teams, and cooperating teachers
- 1.3 Conducting an initial conference during which the work relationship is explained
- 1.4 Providing the person being served by the mentoring experience with appropriate guidance and assistance for assuming role responsibilities
- 1.5 Providing a variety of growth experiences for the persons being served by the mentoring relationship

2.0 The mentor demonstrates knowledge of the various roles to be played in a mentoring relationship by:

- 2.1 Planning jointly with persons in a mentoring relationship
- 2.2 Offering constructive feedback which documents observation data, analyzes data, assesses behaviors of the person being served in a mentoring relationship, and identifies teaching behaviors needing change
- 2.3 Understanding the diverse role(s) of a mentor as teacher, facilitator, resource provider, resource linker, and evaluator/assessor
- 2.4 Using methods for delivering technical assistance to persons being served by a mentoring relationship
- 2.5 Fostering the role(s) and interrelationship(s) of personnel from institutions of higher education and local education agencies in planning experiences for persons being served by a mentoring relationship
- 2.6 Working collaboratively with institutions of higher education to plan experiences for persons being served by a mentoring relationship

3.0 The mentor demonstrates the skills necessary for the establishment of productive helping relationships by:

- 3.1 Employing the characteristics of constructive helping relationships in the support process
- 3.2 Describing ways in which constructive helping relationships apply to the role of a mentor

- 3.3 Recognizing the importance of individuals becoming independent as they grow toward professional competence.
- 3.4 Describing ways to assist persons being served by a mentoring relationship to become independent through professional growth
- 3.5 Using empathy in helping relationships
- 3.6 Focusing on the needs of persons being served by a mentoring relationship
- 3.7 Conveying a genuine regard for persons being served by a mentoring relationship

4.0 The mentor demonstrates an understanding of concepts of the adult as a learner as he/she relates to persons being served by a mentoring relationship by:

- 4.1 Describing the ways in which adults learn cognitively and experientially
- 4.2 Identifying the implications of adult conceptual development for the mentoring relationship

5.0 The mentor demonstrates the ability to utilize appropriate techniques for assessing the levels of functioning of persons being served in a mentoring relationship by:

- 5.1 Describing the relationship of evaluation to the teaching/learning process
- 5.2 Developing, constructing, and using appropriate data collection strategies and/or instruments for the assessment of skills of persons being served by the mentoring relationship
- 5.3 Constructing and utilizing guidelines for observation by employing a rational planned sequence of activities such as those described in the Cycle of Assistance, including pre-conference, observation, analysis, prescription, post-conference, and implementation
- 5.4 Applying to the Cycle of Assistance the conditions that promote growth, including, as appropriate, role-taking, reflection, balancing of reflection and experience, support and challenge, and continuity
- 5.5 Using the North Carolina Teacher Performance Appraisal Instrument for formative appraisal of skills

Communicating

6.0 The mentor demonstrates the ability to use effective communication skills by:

- 6.1 Showing sensitivity to the needs and feeling of persons being served by a mentoring relationship, all students, parents, and other professionals
- 6.2 Identifying and avoiding the use of communication blockers that impede effective communication

6.3 Using elements of effective communication such as language appropriate to the listener, clear speech, concise language, and fluent language

6.4 Using non-verbal behaviors appropriate to the goal of the communication task

6.5 Identifying communication problems that occur in the school environment

6.6 Developing effective communication techniques to overcome communication problems

7.0 The mentor demonstrates the ability to communicate orally by:

7.1 Giving oral directions that are understood by the learner

7.2 Clearly explaining lesson content

7.3 Clarifying misinterpretations by the learner

7.4 Using successful oral communications with persons being served by a mentoring relationship, other professionals, parents, and students

7.5 Using questioning techniques and strategies on a variety of cognitive levels appropriate for achieving multi-purposes

8.0 The mentor demonstrates skills of effective listening by:

8.1 Using reflective listening skills to ensure that the speaker's message is understood accurately

8.2 Using active listening skills as a means to improve communication with persons being served by a mentoring relationship, other professionals, parents, and students

9.0 The mentor demonstrates the ability to communicate clearly in writing by:

9.1 Providing written directions that are understood by the learner

9.2 Providing lesson content in a written format

9.3 Developing written teaching and learning tools, informal assessment instruments, and instructional aids

9.4 Writing effective narrative descriptions

9.5 Writing and communicating with others in the school environment, such as persons being served by a mentoring relationship, parents, students, co-workers, etc.

Effective Teaching

10.0 The mentor demonstrates the ability to apply learning theory and research findings to classroom instruction by:

- 10.1 Understanding and using lesson plans effectively as demonstrated by:
  - 10.1.1 analyzing the components of a prepared lesson
  - 10.1.2 designing lessons using the elements of a six-step lesson plan format, as outlined in the North Carolina Effective Teaching Training Program (Focus and Review, Statement of Objectives, Teacher Input, Guided Practice, Independent Practice, and Closure) and alternative models appropriate to learners and tasks
  - 10.1.3 using diagnostic information to develop and revise a lesson
  - 10.1.4 identifying and developing resources necessary to present a lesson
- 10.2 Studying, evaluating, and utilizing appropriate research and resources in instructional activities

11.0 The mentor demonstrates the ability to model effective classroom instruction by:

- 11.1 Modifying and adapting instructional materials and activities to fit the needs of individual students
- 11.2 Using a variety of techniques to increase the likelihood of student success
- 11.3 Using methods of instruction appropriate for individual student learning styles
- 11.4 Monitoring student success rate as an indicator of effective instruction

12.0 The mentor demonstrates the ability to plan effectively for instruction by:

- 12.1 Describing and applying a planning model to the presentation of instruction
- 12.2 Utilizing student assessment information as a basis for planning
- 12.3 Maintaining continuity in lessons across units of study and periods of time
- 12.4 Developing units of study that capitalize on the individual differences of students
- 12.5 Maintaining lesson plans that are used daily to guide instruction
- 12.6 Using time management skills in the instructional planning process
- 12.7 Organizing learning activities and goals in a logical and sequential manner

13.0 The mentor demonstrates the ability to develop and utilize instructional materials and techniques for instructional presentation by:

- 13.1 Implementing learning activities in a logical sequence

13.2 Conducting lessons using a variety of teaching methods

13.3 Using teaching methods appropriately suited to objectives, learners, and environment

13.4 Working appropriately with individuals in small and large groups

13.5 Working appropriately with students with exceptional needs

13.6 Demonstrating effective techniques for making transitions from one activity to another

14.0 The mentor demonstrates the ability to use effectively the available school and community resources in the delivery of instructional services by:

14.1 Understanding the functions of resource personnel within the schools

14.2 Identifying, contacting, and using school and community resource personnel

14.3 Including school resource personnel in the instructional program

14.4 Sharing knowledge of available resources with other school personnel

14.5 Using instructional and media materials from the school and community agencies

15.0 The mentor demonstrates knowledge of overall curricular goals and objectives in area and/or grade level of specialization by:

15.1 Relating objectives of the subject to the demands of contemporary society

15.2 Demonstrating broad knowledge of subject content in the appropriate academic disciplines

15.3 Developing units of study and lesson plans that relate subject area goals and activities to events in students' lives

15.4 Providing opportunities for students to apply understandings they have acquired

15.5 Working closely with fellow teachers to continually revise and update the educational plan for the school

16.0 The mentor demonstrates evidence of continuous professional development by:

16.1 Participating in professional growth activities

16.2 Seeking and sharing professional materials and ideas

16.3 Keeping abreast of developments in professional knowledge through involvement in educational organizations and/or reading professional literature

Applications

17.0 The mentor presents documentation of at least the following experiences:

- 17.1 Teaching successfully for at least three years
- 17.2 Achieving career status
- 17.3 Leading/coordinating activities/experiences for other adults in a work setting
- 17.4 Observing and documenting classroom teaching episodes
- 17.5 Diagnosing and prescribing based on the criteria set forth in the North Carolina Teacher Performance Appraisal Instrument
- 17.6 Conferencing with other adults to communicate the results of observation/documentation/diagnosis
- 17.7 Organizing and presenting training experiences to other adults in an educational setting

Adopted 3/87

Appendix

COMPETENCIES AND INDICATORS FOR STUDENT TEACHERS

1.0 The student teacher demonstrates an open and flexible teaching personality by:

- 1.1 Consistently maintaining a fair and friendly attitude
- 1.2 Displaying ability to accept each pupil "as is" and helping him/her from that point
- 1.3 Accepting pupils' responses and responding to students' questions in a non-defensive manner
- 1.4 Exhibiting a positive self-image
- 1.5 Individualizing instruction to the extent possible in a classroom situation

2.0 The student teacher demonstrates an appropriate understanding of teaching-learning situations by:

- 2.1 Adapting the material to the level of the learners
- 2.2 Setting attainable goals for all students and for the teacher
- 2.3 Presenting materials at proper level of concreteness-abstraction
- 2.4 Diagnosing pupil achievement and prescribing appropriate learning activities and materials based upon the diagnosis
- 2.5 Setting reasonable, measurable objectives and evaluating outcomes

3.0 The student teacher demonstrates suitable concern for personal health and vitality by:

- 3.1 Arriving at school punctually, alert, and "ready to go" each day
- 3.2 Being consistently prompt and in attendance
- 3.3 Discharging teaching and related responsibilities promptly and efficiently

4.0 The student teacher demonstrates effective speaking and listening skills by:

- 4.1 Pronouncing words clearly and distinctly
- 4.2 Using an adequate and appropriate vocabulary
- 4.3 Using the voice to set a variety of moods
- 4.4 Using standard English

4.5 Speaking on the grammatical level appropriate to the situation

5.0 The student teacher demonstrates the ability to work cooperatively with other staff members by:

5.1 Listening rather than talking at appropriate times

5.2 Assuming shared responsibilities

5.3 Responding positively toward supervision by principal and/or supervisor(s)

5.4 Accepting criticism and suggestions from peers

5.5 Sharing materials, techniques, and space with staff

6.0 The student teacher demonstrates the ability to profit from feedback by:

6.1 Taking criticism in a positive manner

6.2 Utilizing self-evaluation

6.3 Being available and willing to discuss criticism

6.4 Properly reading student responses for understanding of material

7.0 The student teacher demonstrates maturity of judgment and ability to make realistic decisions by:

7.1 Weighing alternatives and choosing wisely

7.2 Basing decisions on adequate information

7.3 Behaving calmly and rationally during a crisis

7.4 Designing achievable objectives

7.5 Making decisions which support clearly expressed goals

8.0 The student teacher demonstrates command of subject matter by:

8.1 Identifying major concepts of the subject area

8.2 Selecting content appropriate for level of class

8.3 Identifying skills basic to content area

8.4 Integrating knowledge from various fields

8.5 Using questioning techniques incorporating various levels of questioning

8.6 Helping pupils recognize the purpose and importance of topics or activities

9.0 The student teacher demonstrates effective lesson preparation by:

9.1 Specifying or selecting learner objectives for lessons

9.2 Specifying or selecting teaching procedures for lessons

10.0 The student teacher demonstrates effective classroom management by:

10.1 Providing feedback to learners about their behavior

10.2 Promoting comfortable interpersonal relationships

10.3 Maintaining appropriate classroom behavior

10.4 Managing disruptive behavior among learners

10.5 Demonstrating consistency in the conduct of classroom management procedures

10.6 Reinforcing pupils in a positive manner

10.7 Developing a sense of self-management on the part of students

11.0 The student teacher demonstrates ability to perform a variety of critical teaching tasks by:

11.1 Reinforcing pupils' positive self-concepts

11.2 Diagnosing class and individual problems

11.3 Planning for the individual needs of pupils

11.4 Handling confidential information appropriately

11.5 Asking thought-provoking questions

11.6 Diagnosing pupil achievement and prescribing appropriate learning activities and materials based upon the diagnosis

12.0 The student teacher demonstrates competence in evaluating students by:

12.1 Using teacher-made or teacher-selected evaluation materials or procedures which are valid and reliable to obtain information about learner progress

12.2 Communicating with individual learners about their needs and progress

12.3 Using a variety of procedures, techniques, and instruments in evaluation

12.4 Applying results of evaluation for diagnostic purposes

12.5 Using evaluations as a basis for re-teaching

12.6 Establishing clearly stated standards of achievement for pupils

13.0 The student teacher demonstrates ability to motivate learners by:

13.1 Showing enthusiasm through voice, actions, and preparation

13.2 Setting realistic expectations

13.3 Relating subject matter content to daily problems and occupational experiences

13.4 Taking advantage of existing student interest as a vehicle to more effective motivation

14.0 The student teacher demonstrates a fair and just attitude in dealing with students by:

14.1 Setting realistic standards of behavior

14.2 Practicing courtesy with students

14.3 Exhibiting honesty and high morals as a model for students

14.4 Showing no bias towards students

14.5 Refraining from derogatory statements about students to colleagues

15.0 The student teacher demonstrates a commitment to teaching by:

15.1 Spending adequate time in preparation

15.2 Participating actively in student teaching seminars or seminars for regular teachers where appropriate

15.3 Centering attention on students' needs rather than on personal concerns

15.4 Continuing attempts to correct weaknesses and enhance strengths

15.5 Giving student teaching first priority in thinking and planning

16.0 The student teacher engages in continuing professional growth by:

16.1 Participating in professional growth activities

16.2 Sharing and seeking professional materials and ideas

16.3 Participating in pre-professional organization(s)

COMPETENCIES AND INDICATORS FOR COOPERATING TEACHERS WHO SUPERVISE STUDENT TEACHERS OR INTERNS

1.0 The cooperating teacher demonstrates evidence of continuous professional development by:

- 1.1 Participating in professional growth activities
- 1.2 Sharing and seeking professional materials and ideas
- 1.3 Having active membership in appropriate professional organizations
- 1.4 Reading professional literature extensively

2.0 The cooperating teacher demonstrates respect for the dignity and worth of all individuals by:

- 2.1 Conducting classes so that no partiality is shown to any special group
- 2.2 Treating each person as a unique individual
- 2.3 Considering needs of others
- 2.4 Using positive techniques of discipline

3.0 The cooperating teacher demonstrates effective human relations skills dealing with students, parents, and other professionals by:

- 3.1 Showing sensitivity to the needs and feelings of students, parents, and other professionals
- 3.2 Exhibiting patience, empathy, and understanding
- 3.3 Maintaining appropriate classroom behavior
- 3.4 Working cooperatively with colleagues, administrators, and community members

4.0 The cooperating teacher demonstrates the ability to plan effectively for instruction by:

- 4.1 Maintaining continuity in lessons across units of study and periods of time
- 4.2 Using a variety of materials, techniques, and equipment in the instructional process
- 4.3 Developing units of study that allow for the individual differences of students
- 4.4 Maintaining lesson plans that are used daily to guide instruction

5.0 The cooperating teacher demonstrates ability to construct effective instruments and techniques for instruction by:

5.1 Planning learning activities in a logical sequence

5.2 Planning lessons for individuals, and small and large groups

5.3 Planning lessons for students with exceptional needs

5.4 Developing teaching methods appropriate for objectives, learners, and environments

6.0 The cooperating teacher demonstrates the ability to utilize effective instruments and techniques for instruction by:

6.1 Implementing learning activities in a logical sequence

6.2 Conducting lessons using a variety of teaching methods

6.3 Using teaching methods appropriate for objectives, learners, and environment

6.4 Working appropriately with individuals, and small and large groups

6.5 Working appropriately with students with exceptional needs

7.0 The cooperating teacher demonstrates the ability to communicate clearly in speaking by:

7.1 Giving oral directions that are understood by the learner

7.2 Clearly explaining lesson content

7.3 Clarifying lessons that may be understood by the learner

7.4 Effectively using oral communication with parents, students, and other professionals

7.5 Using listening skills as an effective means of communication with parents, students, and other professionals

8.0 The cooperating teacher demonstrates the ability to communicate clearly in writing by:

8.1 Providing written directions that are understood by the learner

8.2 Providing lesson content in written form

8.3 Constructing evaluative instruments

8.4 Using effective written expression

8.5 Using written communication with parents, students, and other professionals

9.0 The cooperating teacher demonstrates the ability to apply learning theory and research findings to classroom practice by:

9.1 Understanding and using lesson plans effectively

9.2 Changing and adapting instructional materials and activities to fit the needs of each child

9.3 Using a variety of techniques to achieve student success

9.4 Using methods of instruction appropriate for individual student learning styles

9.5 Providing a variety of instructional materials appropriate for a variety of learning styles

9.6 Studying, evaluating, and utilizing research findings and resources in instructional activities

10.0 The cooperating teacher demonstrates the ability to utilize effectively the available school and community resources in the delivery of instructional services by:

10.1 Understanding the functions of resource personnel within the school

10.2 Using school resource personnel in the instructional program

10.3 Identifying, contacting, and using community resource personnel

10.4 Conducting orientation programs for all volunteers

10.5 Using instructional and media materials of the school and community agencies

10.6 Sharing knowledge of available resources with other school personnel

10.7 Using parents, retired persons, and other community volunteers

11.0 The cooperating teacher demonstrates knowledge of overall curricula goals and objectives in area or grade level of specialization by:

11.1 Relating objectives of the subject to demands of contemporary society

11.2 Demonstrating broad knowledge of subject content in the appropriate academic disciplines

11.3 Developing units of study and lesson plans that relate to the subject area

11.4 Giving clear concise instructions and explanations

11.5 Organizing learning activities in a logical and sequential manner

11.6 Providing experiences for students to apply understandings that they have acquired

11.7 Choosing materials that are appropriate for each instructional level

11.8 Identifying needs and using techniques that work best for the student

11.9 Working closely with fellow teachers to continually revise and update the educational plan used in the school

12.0 The cooperating teacher demonstrates the ability to construct appropriate instruments for the evaluation of student learning by:

12.1 Developing effective communication skills in order to empathize with the problems of the student teacher

12.2 Constructing guidelines to observe student teacher effectiveness in the classroom

12.3 Coordinating daily activities with the student teacher

12.4 Developing a plan to systematically relinquish control of the classroom to the student teacher

13.0 The cooperating teacher demonstrates the ability to utilize appropriate techniques for the evaluation of student teaching by:

13.1 Using effective communication skills in order to empathize with a student teacher who has problems

13.2 Exhibiting the ability to utilize guidelines for the observation of the student teacher in the classroom

13.3 Exhibiting the ability to plan jointly with the student teacher

14.0 The cooperating teacher demonstrates knowledge of the theories and techniques of supervising student teachers by:

14.1 Adapting methods of supervision to fit the individual needs of the student teacher

14.2 Utilizing supervisory techniques based on a consistent theoretical position

14.3 Demonstrating awareness of research related to supervision of student teaching

14.4 Exhibiting the capacity for effective and meaningful evaluations of student teachers

15.0 The cooperating teacher demonstrates the ability to utilize appropriate techniques for the evaluation of student teaching by:

15.1 Utilizing methods of supervision to fit the individual needs of the student teacher

15.2 Utilizing supervisory techniques based on a consistent theoretical position

15.3 Applying research related to supervision of student teaching

15.4 Giving effective and meaningful evaluation of student teacher's performance

16.0 The cooperating teacher demonstrates knowledge of the various roles of cooperating teachers by:

16.1 Empathizing with the student teacher who has problems

16.2 Exhibiting a willingness to provide the student teacher with a meaningful experience in the classroom

16.3 Planning jointly with the student teacher

16.4 Offering positive criticism

17.0 The cooperating teacher demonstrates knowledge of the roles of the university/college supervisor by:

17.1 Working in partnership with the university/college supervisor

17.2 Successfully completing training which defines the roles of the university/college supervisor

18.0 The cooperating teacher demonstrates an understanding of the nature and purposes of the student teaching experience by:

18.1 Successfully completing training which defines and elaborates upon the nature of the student teaching experience

18.2 Successfully planning for the student teaching experience

18.3 Demonstrating the ability to provide the student teacher with appropriate guidance and assistance for assuming classroom responsibility

18.4 Providing various types of experiences during the student teaching process

19.0 The cooperating teacher demonstrates the ability to create a learning environment appropriate to the goals of instruction by:

19.1 Providing a learning environment that is attractive and orderly

19.2 Properly using instructional aids

19.3 Using teaching methods which are appropriate for objectives

19.4 Using instructional materials that provide learners with appropriate practice on objectives

COMPETENCIES AND INDICATORS FOR UNIVERSITY SUPERVISORS OF STUDENT TEACHERS OR INTERNS

1.0 The college/university supervisor demonstrates advanced knowledge of curriculum, materials, and learning resources appropriate for grade level or subject area supervised by:

- 1.1 Holding a minimum of a Master's degree from an accredited institution of higher education
- 1.2 Participating in or directing research projects related to the curriculum area
- 1.3 Conducting staff development activities in subject area for public school personnel
- 1.4 Attending conferences and meetings of professional association(s)
- 1.5 Teaching courses in curriculum area
- 1.6 Participating in curriculum development activities related to subject area

2.0 The college/university supervisor demonstrates knowledge or instructional methods/strategies appropriate for grade level or subject area supervised by:

- 2.1 Evidencing successful teaching experience
- 2.2 Serving as a demonstration teacher for subject area
- 2.3 Producing research and publications related to teaching
- 2.4 Holding a North Carolina "G" certificate in the subject area supervised
- 2.5 Engaging periodically in teaching activity in the public schools

3.0 The college/university supervisor demonstrates knowledge and skill in supervision and evaluation of student teachers by:

- 3.1 Completing course work in supervision and evaluation
- 3.2 Documenting experience in supervision

4.0 The college/university supervisor demonstrates ability to communicate clearly in speaking by:

- 4.1 Pronouncing words clearly and distinctly
- 4.2 Using an adequate and appropriate vocabulary
- 4.3 Using the voice to set a variety of moods in the classroom

4.4 Using standard English

4.5 Speaking on the grammatical level appropriate to the situation

5.0 The college/university supervisor demonstrates respect for the dignity and worth of all individuals by:

5.1 Conducting classes so that no partiality is shown to any special group or person

5.2 Treating each person as a unique individual

5.3 Considering the needs of others

5.4 Using positive techniques of discipline

6.0 The college/university supervisor demonstrates the ability to communicate clearly in writing by:

6.1 Providing written directions that are understood by the learner

6.2 Providing lesson content in written form

6.3 Constructing evaluative instruments

6.4 Using effective written expression

6.5 Using written communication with parents, students, and other professionals

7.0 The college/university supervisor demonstrates an understanding of the various agencies involved in the preparation of teachers by:

7.1 Identifying and using community resources appropriate for the preparation of teachers

7.2 Identifying and using State, regional, and national professional associations concerned with the preparation of teachers

7.3 Successfully completing designated training which defines the role(s) of LEAs, IHEs, professional association(s), State Department, etc. in the preparation of teachers

8.0 The college/university supervisor demonstrates continuous involvement in professional growth and development by:

8.1 Maintaining membership in professional associations

8.2 Attending professional meetings

8.3 Participating in professional improvement activities

9.0 The college/university supervisor demonstrates ability to model professional values by:

  9.1 Planning, implementing, and evaluating instruction effectively, as evidenced by student evaluation

  9.2 Endorsing the ethics of the profession

  9.3 Working cooperatively with colleagues, administrators, and members of other agencies involved in the profession

DEPARTMENT OF PUBLIC INSTRUCTION
DIVISION OF TEACHER EDUCATION SERVICES
CERTIFICATION SECTION
301 N. WILMINGTON STREET
RALEIGH, NORTH CAROLINA 27601-2825

Form C-09
Revised 12/92

CERTIFICATION CODES AND INTERPRETATIONS

Certification codes are used on certificates in four columns: Program, Certificate Areas, Class and Experience. The following information is the interpretation of these codes.

COLUMN 1 - PROGRAM CODE: A **two-digit** program code is established for all certificate areas.
The **first digit** indicates the following limitations.

0 _ Continuing Certification. All limitations have been removed. Renewal required by expiration date.
1 _ Provisional Certification. Requires completion of regulations specified for codes 4, 5, and 7.
2 _ Provisional Certification. Valid only for the fiscal year following "date effective."
3 _ Provisional Conditioned Certification. Temporary deficiencies must be satisfied with required credit prior to the beginning of the following school year.
4 _ Temporary Permit. Valid for one year only as specified by State Board of Education regulations 7/22/88. Completion of NTE regulation required to continue beyond the certificate expiration date.
5 _ Initial Certification (Inactive Employment Area). Employment in this area requires notification from the employer to the Certification Section for activation. (Verification of employment is automatic for North Carolina Public School employees by the 408 Personnel Update Process.)
6 _ Provisional Permit. Valid for one year. Requires completion of regulations specified for codes 4 and 7.
7 _ Provisional Certification. Requires completion of renewal requirements; 10 semester hours/15 renewal credits. A minimum of 6 semester hours or 9 renewal credits during the current year is required to extend. The remaining credits must be completed during the second school year.
8 _ Initial Certification (Active Employment Area). Valid for initial employment in North Carolina. Will convert to continuing certification upon successful completion of the North Carolina Initial Certification Program.
9 _ Initial Provisional Certification. Requires completion of regulations specified for code 7 and Initial Certification Program Requirements.
L _ Initial Provisional Lateral Entry Certification. Valid for one year and renewable under provisional regulations. Will convert to continuing certification upon completion of an approved teacher education program and successful completion of the North Carolina Initial Certification Program.
V _ Initial Provisional Conditioned Certification. Valid for current school year and renewable under provisional regulations. Will convert to continuing certification upon completion of required credit, NTE Professional Knowledge Exam, and successful completion of the North Carolina Initial Certification Program.
E _ Statement of Eligibility for Certification. Eligible to receive a certificate for at least one school term. Certificate issuance is contingent upon verification of employment at which time any deficiencies for continuing certification are identified.

The **second digit** identifies the program of preparation which is the basis for issuance of the certificate:

_1 Recommendation for certification by an accredited North Carolina institution based on the completion of an "Approved Teacher Education Program."
_2 Completion of requirements for certification but not a program identified by Codes 01, 03, 04, 06, 08, 09.
_3 Reciprocity certification based on NASDTEC approved program.
_4 Reciprocity certification issued under an Interstate Certification Contract.
_5 Completion of special requirements for certification in vocational education or vocational explorations. This certificate is limited to employment in the area(s) of certification shown.
_6 Reciprocity certification based on completion of an NCATE "Approved Teacher Education Program."
_8 Reciprocity based on programs not accredited by NCATE, NASDTEC, or the Interstate Certification Contracts. Successful completion of the North Carolina Initial Certification Program through employment required to continue certificate.
_9 Endorsement issued under certification regulations adopted by the State Board of Education 5/4/83.
_L Issued to non-teacher education graduates under Lateral Entry certification regulations adopted by the State Board of Education 8/7/85.
_M Completion of certification requirements based on verification of competencies by a state board approved alternative certification process. Adopted by the State Board of Education 1/10/91.
_E Eligibility for certification established by reciprocity. Issuance of the certificate is contingent upon employment and notification of a North Carolina school system.

COLUMN 2-CERTIFICATE AREAS

Special Service Personnel
(Not valid for Teaching)

011	School Administrator - Superintendent***
012	School Administrator - Principal**
113	Curriculum Instructional Specialist**
077	Instructional Technology Specialist - Computers**
078	Media Supervisor**
711	Vocational Director**
88099	Program Administrator (Exceptional Children)**
005	Counselor**
006	School Social Worker
008	Mentor
026	School Psychologist***

Elementary

014	Birth through Kindergarten
015	Pre-K/K Add-on (issued in conjuntion to Elementary or Home Economics)+
020	Elementary - Graduate (Grades 1-8)*
021	Primary (Grades 1-4)*
022	Grammar (Grades 4-8)*
023	Early Childhood Education (Grades K-4)*
024	Intermediate (Grades 4-6)*
025	Elementary Education (Grades K-6)
78-000	Middle Grades (Last three digits show subject) i.e 78-300 Middle Grades Science (Grades 6-9)
78180	Middle Grades Language Arts (Language Arts issued for Middle Grades only)
16-000	Elementary Second Language Endorsement (Last three digits show language) i.e. 16-521 "Spanish Endorsement". Must attach to an Elementary area such as 025 and is valid for full-time assignment in grades 6 and below. +

Secondary Areas (Grades 9-12)

100	English
200	Mathematics
300	Science++
302	Earth Science
303	Physical Science*
310	Biology
320	Physics
330	Chemistry
400	Social Studies++
405	Political Science
410	Geography
420	History
431	Economics
432	Sociology
433	Anthropology
510	French
520	Spanish
530	German
580	Russian
590	Latin
600	Business Education
601	Basic Business*
905	Bible
18-000	Endorsements+ (Last three digits indicate subject) i.e. 18-200 "Math Endorsement" only valid for teaching in less than half-time assignments.
18079	Computer Education Endorsement only. No full certification issued in computer education.
18434	Psychology Endorsement only. No full certification issued in psychology.
18825	Principles of Technology Endorsement only. No full certification issued in principles of technology.

Special Subject Areas (Grades K-12)

074	Instructional Technology Specialists - Telecommunications
075	Associate Media Coordinator*
076	Media Coordinator**
090	Physical Education
096	Safety and Driver Education
097	Health Education
098	Health Specialist
108	Theater Arts
109	Speech
110	English as a Second Language
190	Reading
511	French
521	Spanish
531	German
581	Russian
800	Music
805	Dance
810	Art
88001	Cross Categorical (Mild-Moderate Handicapped) (CC)
88002	Severely/Profoundly Handicapped (SP)
88003	Audiology (AD) **
88004	Preschool Handicapped (PS) (Prekindergarten age group)
88081	Mentally Handicapped (MH)
88082	Speech-Language Impaired (SI)**
88083	Visually Impaired (VI)
88084	Physically/Orthopedically Handicapped (PH)*
88085	Behaviorally/Emotionally Handicapped (BEH)
88086	Specific Learning Disabilities (LD)
88087	Academically Gifted (AG)+
88088	Hearing Impaired (HI)
88089	Hospitalized Homebound *
999	Junior ROTC

Vocational Education

700	Agriculture
701	Agriculture Technology *
710	Home Economics
720	Health Occupations Education
730	Marketing Education
	Trade Preparatory Programs
74010	Auto Body Repair
74015	Automotive or Diesel Repair
74020	Cabinetmaking/Furniture
74025	Carpentry
74030	Cosmetology
74035	Electrical Trades
74040	Electronics
74045	Graphics & Industrial Communications (Printing)
74050	Industrial Maintenance
74055	Masonry
74060	Mechanical System (Heating, Air Conditioning, Refrigeration or Plumbing)
74065	Metals Manufacturing (Machine Shop)
74070	Technical Drafting
74075	Textiles
74080	Welding
74095	Specialized
745	Industrial Cooperative Training
747	Industry Education Coordinator
760	Vocational Business Education
761	Vocational Business Education-Data Processing
770	Handicapped/Disadvantaged
777	Career Exploration
820	Technology Education

COLUMN 3-LEVELS OF PREPARATION

A,VA,PVA,SWA——Bachelor's Degree
G,SG,VG,P,S,CG,SWG——Master's Degree
AP,ASG,AS,AG,ACG,AWG,AVG——Sixth Year (Advanced)
DAP,DG,DAS,DVG,DSG,DCG,DWG,DA——Doctor's Degree
PV,V——Rating below class A

COLUMN 4 - This column indicates, as of the date the certificate was issued, the years of experience credited to each certification area. This experience rating will not always show total years of service in North Carolina public schools due to credit for out-of-state service, public agency service,etc.

Each individual is responsible for knowing about and satisfying the certificate renewal requirements. Failure to renew a certificate causes an individual to be ineligible for employment. The North Carolina employer should be contacted for the latest renewal information.

* Initial certificates cannot be established in these areas. Currently held certificates are valid for employment.

** Initial certificates issued based on minimum master's level preparation.

*** Initial certificates issued based on minimum 6th year level preparation.

+ Cannot be issued unless fully certified in another area.

++ Endorsement not issued in this area.

Division of Teacher Education Services

Ione L. Perry, Director
Linda M. Jones, Secretary

Certification Section

Telephone: 919-733-4125
FAX: 919-715-1153

Van B. Murray, Chief Consultant
Victoria K. Lorren, Secretary

Shirley McLaurin
Administrative Officer

Nancy A. Holt, Certification Specialist
Judy L. Israel, Certification Specialist
Beverly J. McGee, Certification Specialist
Algina P. Mitchell, Certification Specialist
DiAnn H. Murphy, Certification Specialist
Judy A. Stacy, Certification Specialist
Barbara F. Stephens, Certification Specialist
Anne E. Young, Certification Specialist

Diane Ellis, Secretary
Celeta M. Mann, Receptionist
Carolyn J. Pate, Chief Records Clerk
Teresa A. Andrews, Records Clerk
Robin R. Mooneyhan, Records Clerk
Angela R. Rose, Records Clerk
Lallia M. Scarborough, Records Clerk
Michele Manning, Microfilm Clerk

Teacher Education Section

Telephone: 919-715-1120
FAX: 919-715-1153

C. Wayne Dillon, Chief Consultant

Jean W. Blackmon-Brauer, Consultant
Initial Certification Program

JoAnne S. Drane, Consultant
Program Approval

Carl O. Olson, Consultant
Professional Practices Commission

Donna S. Simmons, Consultant
Program Approval

Linda A. Johnson, Scholarship Specialist

Stephanie S. English, Secretary

Jean Hampton, Secretary

Avery R. Johnson, Secretary

Melinda H. Kendall, Secretary

John L. Kinlaw, Assistant State Superintendent
Personnel Services

Bob Etheridge, State Superintendent

North Carolina Department of Public Instruction
301 N. Wilmington Street
Raleigh, North Carolina 27601-2825